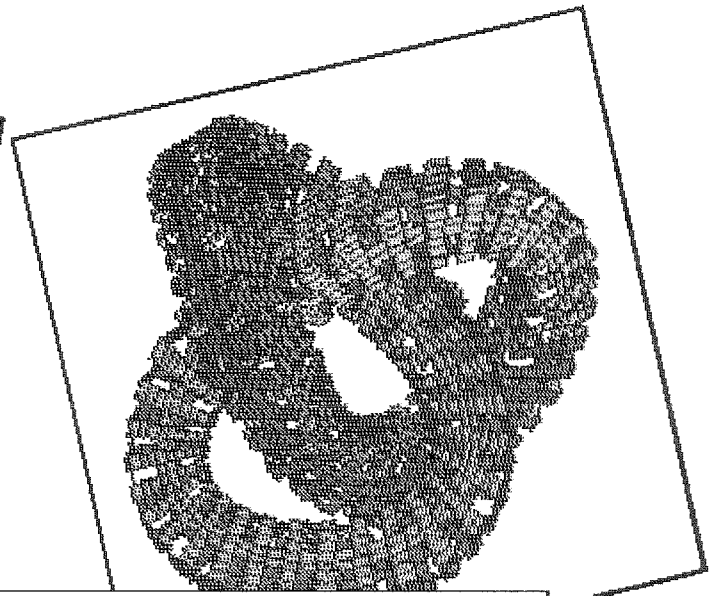
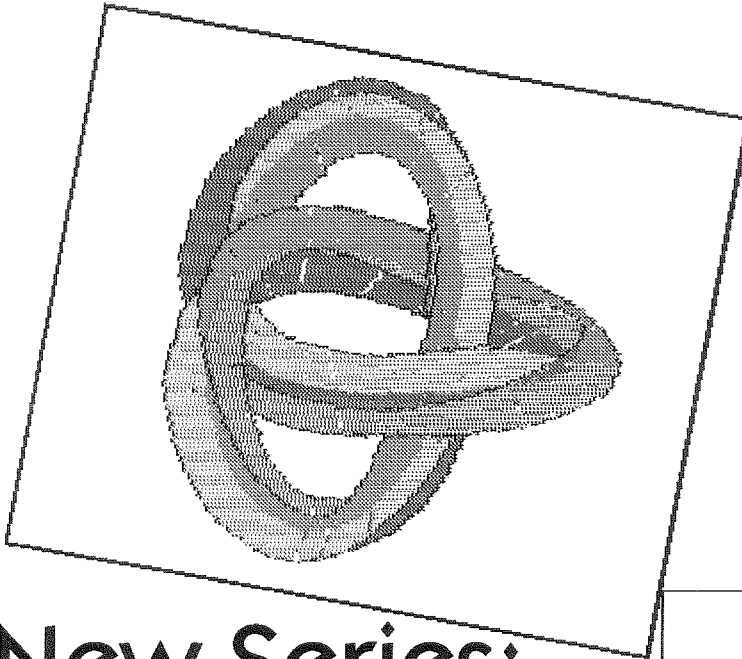


QL Today

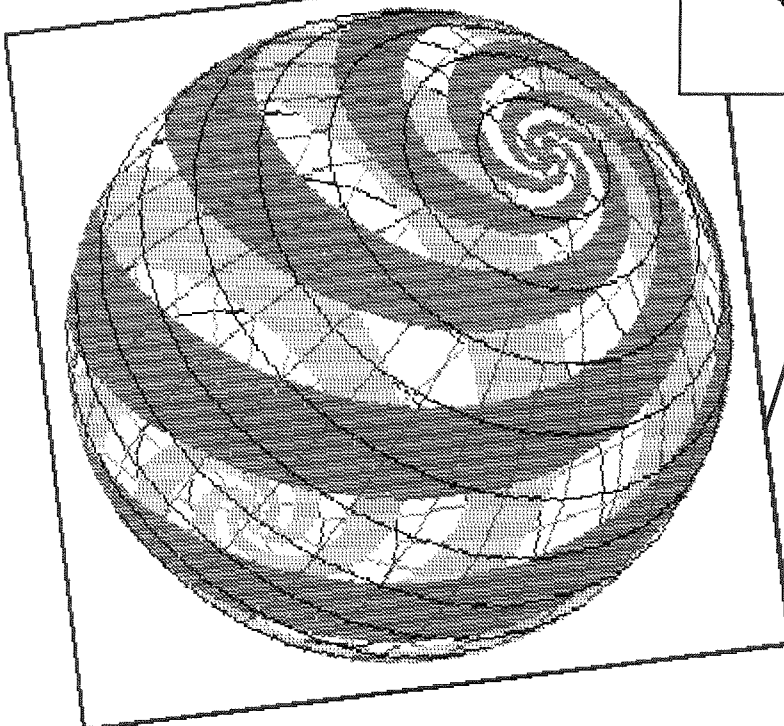
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Sinclair Computers, SMSQ...



**New Series:
Graphics
on the QL**



**Review Special
Insider!**

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German office & Publisher:

Jochen Merz Software
Im stillen Winkel 12
47169 Duisburg
Germany
Email: JMerz@j-m-s.com

Tel. +49 203 502011
Fax +49 203 502012
Box1 +49 203 502013
Box2 +49 203 502014

English office:

Q Branch
P.O. Box 7
East Sussex, United Kingdom BN41 2ND
Email: qbranch@qbranch.demon.co.uk

Tel. +44 1273 386030
Fax +44 1273 381577

Editor:

Dilwyn Jones
41 Bro Emrys
Tal-Y-Bont, Bangor
Gwynedd, United Kingdom LL57 3YT
Email: dilwyn.jones@bbc.co.uk

Tel. +44 1248 354023
Fax +44 1248 354023

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We welcome your comments, suggestions and articles. YOU make **QL Today** possible. We are constantly changing and adjusting to meet your needs and requirements. Articles for publication should be on a 3.5" disk (DD or HD) in ASCII, Quill or text87 format. Pictures may be in _SCR format, we can also handle GIF or TIF To enhance your article you may wish to include Saved Screen dumps. PLEASE send a hardcopy of all screens to be included. Don't forget to specify where in the text you would like the screen placed.

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Issue 2:	15 June
Issue 3:	15 August
Issue 4:	15 October
Issue 5:	15 December
Issue 6:	15 February

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Contents

- 3 Editorial
- 4 News
- 7 Using Internet File Formats on the QL - Timothy Swenson
- 14 superHermes Lite - A Review by Timothy Swenson
- 17 Q-Count Review - Q-Count reviewed by Jonathan Hudson
- 22 John Miller, author of Q-Count, responds to the review
- 22 Screen Viewer - Review by Dilwyn Jones
- 25 On the right Track - TRACK84 Review - Darren D. Branagh
- 26 Pointing at Buttons - PH. Tanner
- 28 30 Easy Ways to say No to Organising a QL Show - Darren D. Branagh
- 28 Small Ads
- 29 Bugs 'n Fixes - Jochen Merz
- 29 Letter Box
- 31 Start Me Up - Jonathan Hudson
- 33 Glossary of Abbreviations and Terms: A ... I - Dilwyn Jones
- 35 Gee, Graphics! (on the QL)? - H.L. Schaaf
- 38 Are you sitting comfortably? - Part 2 - Geoff Wicks
- 39 My QL System - Davide Santachiara
- 44 Byfleet Show Review - James Hunkins
- 45 The first ever Irish QL Show - Darren D. Branagh
- 50 Logical Fundamentals - Part 2 - Stuart Honeyball
- 52 Data Protection on QXL/QPC - Herman Huyg
- 55 Christmas Cajole - Roy Wood

REVIEW SPECIAL

Advertisers

in alphabetical order

Jochen Merz Software	. 9, 57
PROGS - Van der Auwera	. 13
QBOX USA	. 27
QBranch	. 47, 49
Quanta	. 41
Qubbesoft	. 43
W.N. Richardson (EEC)	. 11
TF Services	. 53

Editorial

Dilwyn Jones

At last we are able to bring you several articles which should have been printed in the last issue, but for whatever reason did not make it. Thinking I may be short of articles for the end of summer issue, I went into overdrive gathering articles and for once ended up with too many articles, so apologies are due to contributors such as Jonathan Hudson who worked hard to prepare articles by the deadline and then found them held over to this issue. We also invited QBranch to respond to Jonathan's review, but their response was late arriving, although with this issue we can bring you both the review and the response.

Sadly, we ran out of space again in this issue and a few articles have been held over to the next issue. If you haven't heard from us yet, please accept our apologies, we've just been too busy to reply to everyone.

Would you the readers like more Z88 coverage within the pages of QL Today? Bill Richardson and Darren Branagh have raised this issue with me, claiming that many QL users also have a Z88. There is also a software-based Z88 emulator available from Steve Johnson's PD library. Personally, I sold my Z88 some time ago in favour of a laptop PC and QL emulator, so I don't think I'm being biased in suggesting that Z88 coverage could be included as long as it is relevant to QL users, and that the QL (and compatibles) coverage forms the greater part of the magazine. Please write and let me know what you think on this issue. Quanta have decided to include Z88 coverage within their newsletter, so do you think we should do the same, or should we stick purely to QL and compatibles, or should we include some Z88 articles relevant to QL users or what?

Our competition to find a new name for QL users attracted a fair number of entries and votes, but in the end there was a tie for the prize between two entrants. So we let the dreaded Sinclair Random Number Generator choose the winner, and the prize will be flying from Germany to Mr P. H. Tanner in Glasgow, Scotland soon. The favoured term was "QLers" in the end, despite quite a wide range of suggested collective nouns.

We have a larger than usual number of reviews this month, but don't let that put you off contributing to QL Today! We take

the view that the more people contribute, the better the representation of the QL community as a whole.

I look forward to receiving your letters. Anything for publication longer than a few lines should be sent on floppy disk or microdrive cartridge as a plain text, Quill doc, Text 87 or Perfection file. Accompanying screen dumps should be as QL screens, or PIC files. If you have to, we can accept DOS disks, preferably with plain text files and any graphics as GIF or TIF files.

Looks like it will be a good season for QL hardware releases, what with the two Super Gold Card replacements from Miracle Systems and Qubbesoft P/D, and the ROM-disq from TF Services for example. Not bad on the software front either, what with the release of software like Q-Route and the rumoured new windowing system from Tony Tebby to further add to the long awaited new colour drivers for Aurora, for example. The PD/Freeware scene is also active - see our news article about the new Qascade utility from Jonathan Hudson, for example. There is also a new Windows 95 version of QLayer which can multitask under Windows 95, which of course QPC does not yet manage! So the QL emulator scene is hotting up again. While the QL scene is hardly expanding, there's plenty still happening to keep us QL enthusiasts happy!

Finally, if you've tried to phone me, and got nowhere, my apologies, my day-job has kept me very busy, with the end result that I'm rarely home to take calls at reasonable hours! If you're on email, and need a quick reply, use that medium, as I can reply in any spare moments from work.

Dilwyn Jones



News

NEWS FROM PROGS

PROGS have announced a new ProWesS application. The new program is a file manager called PFile.

The program allows you to do all the customary file manipulations like copy, backup, rename, move, delete, FileInfo link etc. Also creating new subdirectories and formatting devices.

Some special features:

- you can choose whether to include the subtree on the action to be taken
- copying files always retains the file dates
- when indicating a file, you can see the file statistics. When several files are indicated, you can also see the total memory occupied on the medium by those files
- option to select that only files (not) ending in one of a list of extensions are applicable for the chosen action.

It is a true ProWesS program, including online manual and easy installation. The retail price is 900 Belgian Francs, including VAT. The normal postage rates apply. The program is available now.

```
wake do help ProWesS file manager quit Zzz
action : *Fileinfo link          include subtree
port method : *none (game as on disk)  Commands
extensions : c;h;of              Not
directory : WIN1_app_files_      <- Tree All
destination : RAM1_              <- Exchange
file : PWEfile_c                 v17
      23342B                    1997 Oct 21 13:23
all : 24kB free on source        63MB on dest 2013kB
config_of  menutil_h  commands_c copy_c
delete_c   order_c   PFile_c
english_c  rename_c  action_h
menutil_c  fileinfo_c action_c
```

QL ROMDISQ

At the Byfleet Quanta Workshop, TF Services announced their new product called QL ROMdisq. Based on an original design idea by Stuart Honeyball of Miracle Systems, this small circuit board which plugs into the QL's ROM slot gives 2 or 8 megabytes of permanent memory (flash memory). This device can be written to by the QL, but the memory is retained even when the QL is switched off.

Using a technique fairly similar to that used by the Miracle Hard Disk for writing to the QL ROM port (which does not normally allow write opera-

tions), the board includes a logic chip to address the flash memory chips on the board. A device driver by Tony Tebby will allow the board to be accessed as a directory device, with the name ROM1_, allowing the board to be used in a similar way to FLP1_ or MDV1_ or WIN1_, for example. Although not yet completed, it is anticipated that this will allow the use of sub-directories like the present level 2 floppy disk and hard disk drivers. ROM1_ will take priority if it contains a BASIC program called BOOT, so you can make your QL start up from the contents of the RomDisq, so you could for example place your QPAC2 boot, or even SMSQ/E into the ROMdisk to arrange for a portable, fast startup sequence. You can also add your favourite programs in there, space permitting, so it could be a mini hard disk if you wish. Extensions files such as those for initialising SuperHermes could also be stored if desired.

Although the device is rewritable up to 100,000 times, the designers made it clear that it should be viewed as a permanent store, rather than as RAM memory as such, since the erase process is slow and the device by nature has a finite life based on the total number of writes made to it. If used as a device to store your startup files and favourite programs, it can be occasionally rewritten to in order to update revised versions of programs, for example.

Tony Firshman claims this is the most complex QL PCB to date for its size (about the size of a standard plug in EPROM cartridge), using state of the art PCB technology with 7 thou wide tracks and 6 thou clearances, 3 metres of track and 270 component pins. It is said to have gold plated edge connectors for improved contact reliability. Although originally intended to be supplied as an uncased board, opinion at the workshop was that it should be cased or at least protected in some way, so Tony Firshman said he would look into the possibilities of casing or sleeving the board if this could be done without raising the price significantly.

The device can be supplied with an Aurora ROM port adaptor at an extra cost of 3 pounds if required.

Users of one particular combination of equipment, Aurora+Qubide+Gold Card, will need a modified GAL (Gate Array Logic) chip on their Qubide, which TF Services will be able to supply. This only applies to that particular combination of equipment.

The 2MB version is expected to cost £39.00, while the 8MB version should cost £98.00. Both

are expected to be available towards the end of November 1997.

If the reaction of visitors to the show to this device was anything to go by, this product looks set to be a winner. Certainly, many people were going around asking why nobody had thought of this idea before!

THESAURUS GOES POINTER!

The much requested pointer environment version of QL-THESAURUS has now been released. QL-THESAURUS v. 4.00p introduces a new house style for pointer environment programs in the JUST WORDS! range, and heralds the way for pointer environment versions of the other programs.

Most operations in QL-THESAURUS can now be 'mouse controlled' allowing searches to be made quickly and efficiently. The output from QL-THESAURUS can be imported into a word processor using the stuffer buffer.

The data-base of QL-THESAURUS has also been extensively revised to cut out some of the 'dead wood', and replace this with words and phrases reflecting present day English usage.

For QL users who prefer not to use the pointer environment, a non-pointer version is also provided.

QL-THESAURUS costs £15.00 and is available from the author or from QBranch. The upgrade price from earlier versions is £2.50 plus return of the master disk or other proof of purchase. Users wishing to avoid bank charges may pay by 10 1st class stamps (UK) or 3 IRCs (Non-UK).

Geoff Wicks, 28 Ravensdale, Kingswood, Basildon, Essex, SS16 5HU Tel: 01268-281826

QUBBESOFT P/D NEWS

Qubbesoft P/D have announced price reductions on some of their products. Following a price reduction by the supplier, the price of EZ-135 cartridges is down from £17.00 to £15.00. And the price of the Aurora card is down from £120.00 to £100.00 until the end of the year in order to stimulate sales in the run up to Christmas.

Qubbesoft have taken delivery of a sample version of an EIDE version of the Syquest EZ-Flyer drive. Designed to use removable 230MB media, the drive is also claimed to be compatible with earlier EZ-135 cartridges, both for reading from and writing to these cartridges, which is good news since the EZ-135 drives are no longer available. If the drive works satisfacto-

rily with Qubide, and the price is reasonable, Qubbesoft aim to supply this drive in place of the now unavailable EZ-135 drives. At the time of writing, Qubbesoft had tested the sample drive and found it to work, and were studying prices and availability before finally deciding whether or not to sell the product to QL users.

Qubide ROM version 1.55 is now available. This fixes a long-standing backup dates problem in all earlier versions. Also, you can now have bigger partition sizes, thanks to an increased range of block size options, up to 32k per block. Different partitions can now have different block sizes, so if you wish to have one partition set up to cater for large files like clipart, while the more efficient smaller block sizes are used for smaller text files, for example, this is now quite possible.

Qubbesoft, at the time of writing, were about to release a second collection of Line Design clipart on EZ-135 cartridge (also available on zip drive cartridge), priced at £25.00 including cartridge. A collection of QL bitmapped graphics called EZ-Screens will also become available. This will consist of around 100MB of QL screens (uncompressed for maximum software compatibility) on various subject matter. This will also cost £25.00

Contact Qubbesoft P/D for any further details.

ULTRA GOLD CARD

Miracle Systems is working with TF Services and QBranch on a new accelerator card for the QL. The final specification has yet to be fixed although the following description should not be too wide of the mark. It is, however, tentative and so expect to see some differences in the card when it becomes available.

The processor will be the 68060 which is currently the fastest member of the 68000 family and should give an 8-fold speed improvement over the SUPER GOLD CARD. Memory expansion will be by way of a SIMM socket allowing for low cost RAM upgrade. It will have all the SGC features like TK2, ED disk interface and battery backed clock. The Centronics parallel printer port will be of the new bidirectional (EPP/ECP/IEEE1284) variety. The "super I/O" chip which I propose to use (SMC's FDC 37C93X) also has 2 serial ports, a keyboard port and an IDE port which will probably all be made use of. I also intend to add some form of improved audio interfacing.

What's really required though in the QL field is something new and I perceive this to be

multiprocessing. It is true that this has been done before but not in a way that is cheap and accessible. The ULTRA GOLD CARD will have a high speed network so that many of these will be able to be connected together and use each other's processing power. At the start only the hardware will be there but this will present a challenge to the software geniuses within the QL community to make good use of it. In the not too distant future you will be able to come along to a workshop, plug in your ULTRA GOLD CARD to the network, and experiment with processing power rated in GIPS!

QBRANCH NEWS Q-ROUTE RELEASED

Rich Mellor has now completed the task of porting over the Routemaster program from the Atari to the QL. Converted with the permission of the original author, Brian Henderson, the program gives QL users the long desired facility to run a program which can work out routes for you between given places in Britain. The program is pointer driven, needs a minimum of 896k memory (Trump Card or greater) and runs on QDOS or SMSQ/E based systems. Toolkit 2 is needed, but that is included on board Super Gold Cards, TrumpCards, Gold Cards, SMSQ systems and so on. The necessary pointer environment files are included for QDOS based systems, but some of these are ignored by SMSQ/E systems as the equivalent of ptr_gen, wman and hot_rext are included in SMSQ/E.

Although only a British place name list and map is supplied, if the user can locate another place name data list and maps by downloading Atari versions from the Web (an URL is provided in the manual), they are interchangeable. Other maps are under development, and a collection of European maps will be available later.

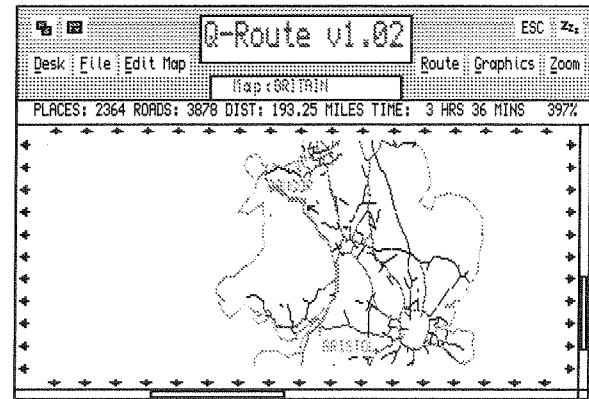
Q-Route allows you to edit and add roads and place names (e.g. for when new road are opened). This allows you to alter it in the future if need be.

In use, you simply specify where you want to start from, where you want to end up and the program will work out a route for you and this can be displayed either graphically or as a text list showing roads to take etc. Certain preferences can also be set, such as the average speed possible for the various types of roads such as single carriageways, dual carriageways or motorways. Of course, you can also specify whether to show distances in kilometres or old fashioned miles. There is a Zoom facility, to

focus in on a given section of a displayed map.

There is a printout facility and you can either specify your own printer driver codes list for your typ of printer, or usefully you can load an Xchange or Perfection printer driver table for the program to use.

Q-Route costs £25.00 from Q-Branch, and comes complete with an extensive printed manual and a single 3.5 inch floppy disk containing the program.



The screenshot shows the text-based interface of Q-Route v1.02. It has the same title bar and menu bar as the graphical version. The status bar is identical. Below the status bar is a table with the following columns: FROM, TO, MILES, ROAD, and AC.

FROM	TO	MILES	ROAD	AC
BANGOR	A5 A55 JUNCTION	3	A5122	
A5 A55 JUNCTION	SHREWSBURY	79.50	A5	
SHREWSBURY	MUCH WENLOCK	12	A458	
MUCH WENLOCK	BRIDGNORTH	8	A458	
BRIDGNORTH	KIDDERMINSTER	13	A442	
KIDDERMINSTER	M5 J6	14	A449	
M5 J6	M4 J20	53.75	M5	
M4 J20	M4 J19	3	M4	
M4 J19	M32 J3	6	M32	

Further Q Branch News is that we intend to market the new 'Knight Safe' program by Mark Knight. This is a hard disk backup program with a lot of good features. Work is continuing on Colour Printer Drivers for Text 87, a pointer driven front end for the PD DBAS program and a musical notation writing program from Barry Ansel.

Progs have sent QBranch the Alpha release of Pwfile which is a file handling program for ProWesS and at the time of writing, QBranch were awaiting a fixed version of the pointer driven Thesaurus by Geoff Wicks.

Work is also continuing on the Ultra Gold Card which will now be a joint project between Miracle, Q Branch and T.F. Services. It will now be a Super Gold Card replacement and not sit alongside a Super Gold Card.

QLAY 0.84

Jan Venema has released version 0.84 of QLAY, the freeware QL emulator for PCs. This version runs on Windows 95 in its own real window, and not in a DOS box, which means it can multitask within the Windows environment. The Windows 95 version of QLAY is called QLAYW, but there is also a version for DOS users, and also a version for Linux users (version 0.83).

Jan says that the Windows 95 version is still somewhat limited compared to the DOS and Linux versions. Known problems which still exist include poor error detection and reporting, no mouse support, only 256 colour Windows 95 support, one screen size and no LEDs.

After downloading from Jan's Web site, installation consists of unzipping an archive of approximately 150k length, then moving a file called rsxnt.dll into your Windows\System directory and then simply placing qlayw.exe in your QLAY directory on the PC's hard disk.

Readers may also be interested to hear that there is also a 26k archive on this site consisting of a QDOS manual, which lists basic commands (including those in some common toolkits) and operating system calls. Not as comprehensive as some of the printed publications you can buy, but since this is free, it may be worth a look, if only for keeping as a reference text file in which you can search for information with Find commands in editors.

The Web site address is:

<http://www.inter.nl.net/hcc/A.JawVenema>

PAGE DESIGNER 3/S

The most recent version of the long running Page Designer series of DTP programs is now available from QBranch and JMS. Written by Barry Ansell, author of the original Page Designer 3, this latest incarnation is an SMSQ/E specific enhanced version of the program. It offers use of 4 display sizes up to 1024x512 pixels, allowing the program to use a much greater work area on the higher resolution screens available on QXL, QPC and Aurora, for example.

New features include integrated help files based on the original manual, a machine coded pattern fill routine, the facility to load and save in the pointer environment area save (PIC) file format, and the facility to resize the loaded page if different to current page size and within the limits of memory configured for use by the program.

The new version is supplied with a supplementary manual explaining the new facilities and the configuration options, and also explaining

how to transfer the program to run from a directory on your hard disk.

Page Designer 3/S costs £40.00, or £15.00 as an upgrade from an earlier Page Designer 3 (return master disks for the upgrade).

We hope to have news on the colour screen driver in the next issue!



Using Internet File Formats on the QL

Timothy Swenson

Those of us in the QL world have not been totally immune from the hype and lure of the Internet. I've seen discussions of writing Web browsers and network drivers for the QL. Although it would be interesting to browse the Internet on the QL, it is not the platform that I am looking to use for my browsing.

Even without the ability to browse the web on the QL, just getting information from the Internet to the QL or vice versa can be very useful. Using a simple Unix Shell account from an Internet Provider and Lynx, a text-only web browser, you can get access to all kinds of information that can be brought to the QL and used.

This article discusses the various formats used on the Internet and how they can be handled on the QL and even how to create files, on the QL, in these formats. The point of the article is that, even though the QL does not have native capabilities to use the Internet, it can still be useful once you get the data off the Internet.

Textual Formats

The written word is distributed on the Internet in a variety of formats. By the written word, I mean documents, papers, books, etc.

ASCII

ASCII text is the lowest common denominator when it comes to computers sharing information. ASCII is known as "pure ASCII text", "pure text", "text file", and so on. Since the QL character set is a superset of ASCII, the QL can handle ASCII text.

The biggest problem is handling the End Of Line (EOL) marker. On the QL it is New Line

(NL). On the Mac it is Carriage Return (CR). In MS-DOS it is both (CR) and (LF). In Unix, it is just (NL), like the QL. If you are using a communications program, it will handle the EOL marker conversion for you. If you are copying files off a disk or transferring data in binary mode, you will need to do the conversion yourself. A number of text editors can strip out CR's. A simple program can be written to take out CR's and/or add LF's.

HTML

HyperText Meta Language (Hyper Text Markup Language in Britain) is really ASCII text with a number of formatting commands and requires a viewer program to display and print them. There are two HTML viewers for the QL, QMOSAIC and the one that comes with ProWesS. QMOSAIC is no longer being developed and is limited in what it can do. The ProWesS browser is new and still being developed and supported.

If you don't have an HTML viewer, you can get the information out of the file by stripping out the HTML formatting commands. `striptml_c` is a C program that does this and was published in the QL Hacker's Journal. The data can then be read into QUILL and made presentable.

Since HTML is pure text, you can create HTML documents on the QL with any text editor. The problem is that you have to know HTML yourself. In the PC and Mac world, there are programs that allow a person that does not know HTML to create HTML documents. A popular program is the one that converts from Microsoft Word to HTML. I've seen it used and it produces some nice looking HTML documents. [On the QL, there is also Roy Wood's HTML Machine program, on QL Today's first cover disk, and available from PD libraries - Editor]

Learning HTML is not all that difficult. There are only a handful of commands that are necessary for all HTML documents and simple documents can be generated fairly easy. There is a dearth of books available on how to write in HTML. Check your local bookstore or library.

Postscript

Postscript is really a display language that is used in printers. It defines how a page will look, including text, pictures, lines, etc. It is considered an output format. You can edit text

and HTML files, but you don't edit Postscript files. Postscript is what comes out of an application and is sent to a printer.

For many years if you wanted to distribute a document and keep its look consistent, you would distribute it in Postscript format. The receiver of the file would send the file to a Postscript printer and get an exact copy of the printed document. The limitation for the receiver is that they could not edit the document.

Ghostscript is a freeware Postscript viewer that has been ported to the QL. It's not a simple or small program and requires speed, memory, and some disk space. It really needs a hard disk or an ED disk drive to use it well. It also requires a number of font files, which can eat up disk space. Once a document is read into Ghostscript, it can then be printed to your printer. Ghostscript supports the display of both text and graphics. If you have a picture done in Postscript, it can be viewed with Ghostscript.

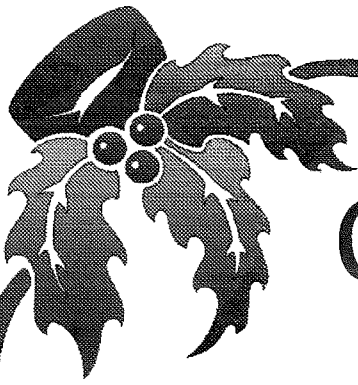
Without Ghostscript, Postscript files can be handled on the QL. All text in Postscript is embedded in the file as text, it's just intermixed with a large number of Postscript commands. Text is always surrounded by {}'s. A simple Postscript text stripper can be written to strip out just the text in the file. This means that any graphic information would be lost, including text done in graphics (like very large letters).

As for creating output in postscript, there is a utility `nenscript` (`nens13.zip`), a clone of the Adobe program `encrypt`, which is a text to postscript converter. `Nenscript` is written by Craig Southern and ported to the QL by Jim Gilmour. Version 1.3 is dated June 94. I've never tried the program, so I can't say much about it.

Adobe Acrobat

Adobe (the company that brought you Postscript) has come up with a portable document format called Acrobat (.PDF). Like Postscript, Acrobat files are display only and are not editable. Like Postscript, Acrobat is designed to be portable across platforms and ensures that the document looks exactly as it was created.

Viewing Acrobat files on the QL is going to be a problem, or so I thought. On Jonathan Hudson's web page he mentions that the latest version of Ghostscript can handle Acrobat files. I was surprised to hear this, but knowing Jonathan, if he says that it does, it does. I feel this a big breakthrough for the QL.

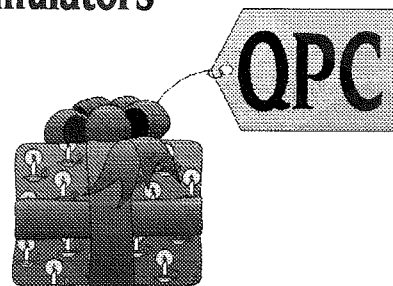


QPC Christmas offer

(valid until 24.12.97)

Get the latest version of QPC for DM 249,- **including postage** (worldwide!) or get it even cheaper if you already own SMSQ/E for any other system (i.e. for the QXL, QL-Atari emulators or (Super)GoldCard: DM 199,- **including postage!**

(Send or fax a copy of your SMSQ/E invoice together with your order as proof of ownership)



QPC Version 1.40 News:

QPC, the 68000 simulator with the inbuilt QL-compatible operating system SMSQ/E, allows you to use most of your QL programs on current PCs (486 or Pentium- MS-DOS 6 or Windows95 is required). The new QPC version 1.40 will be available at the Bristol workshop (30th of Nov.) and by mail order from 1st of December. A little bit of history:

Version 1.13 - noticeable speed improvements.

Version 1.20 - much faster floppy disk and harddisk access (up to 9 times faster!)

Version 1.30 - general speed improvements - average of 10%, up to 20% on Pentiums.

Version 1.40 - more flexible screen driver - **up to twice the speed!** (depending on graphics card)

Not only, that screen output has been speeded up by up to 100%, it is also more flexible (i.e. accepts more VESA modes), supports up to 1600x1200 pixels on screen and re-initialises the display completely after using a DOS-shell.

The manual for QPC has been revised as well, explaining all the new features.

Updates of QPC are free (as usual), you can download it from the JMS-Mailbox or send in the master disk (don't un-install your working copy - just delete it when you receive the update!) and enclose 3 International Reply Coupons for the return postage. If you want the revised manual, add another 5 IRCs or DM 10,-.

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Acrobat is fast becoming THE format for distributing documents. HTML is ok for having formatted text, but each HTML viewer can change how the final product looks. Acrobat keeps your documents looking exactly as you created them. With Ghostscript, you can view all PDF file you get off the Internet.

Now creating Acrobat file on the QL, that's another thing. The program that creates Acrobat files is not available on the QL and I know of no freeware versions available for any platform.

E-Mail Binary Files

E-mail is composed of only ASCII text, but a number of tricks have been created to allow the sending of binary files through e-mail. All of these tricks involve converting these binary files into an ASCII text file (in code), sending them through e-mail, and then converting them back. If you ever get a binary file sent to you like this, and you don't have the tools to convert it back, the data is of no use to you.

UUENCODE

The original program to convert a binary file to ASCII is UUENCODE and UUDECODE. These programs were created on Unix systems and are very popular in the Unix world. These programs work in conjunction with each other. One converts binary to ASCII (uuencode) and the other converts back (uudecode).

Once you get an e-mail with a uuencoded attachment, you edit out all but the uuencoded part and then pass it through uudecode. If you want to send an e-mail message with a binary file attachment, send the file through uuencode and then send the resultant file via e-mail. Some e-mail handlers only allow messages of up to a certain size. There is a program SPLIT that divides a file into a number of files of X lines (where X can be 100, 200, and so on).

uuencode and uudecode come with the C68 distribution. They may come with the GNU text utilities distribution.

MIME

MIME is a newer format standard that works like uuencoding, but it includes some intelligence about the original files. If the original file was a graphic file, MIME marks it as such when it converts it. Then at the receiving end, a MIME-compatible program will know it is a graphic file and fire off a graphics program to

display the file. MIME is designed to handle graphics, sounds, motion files, etc.

Jonathan Hudson has ported over a few MIME utilities. They allow you to read and create MIME encoded files. I have not played with the utilities, so I can't say much more than this.

E-Mail Digital Signatures

PGP

Digitally signing e-mail and documents is getting to be fairly popular on the Internet. Software distributions, security announcements, and other "official" file are being signed using a program called Pretty Good Privacy (PGP). If you want to verify a digital signature or stamp one of your own, you will need PGP. PGP is available for the QL and as reviewed in a previous issue of QL Today.

Binary Archives

File archivers are ways of joining a number of files into one file, for easier downloading and distribution.

PKZIP

The ZIP format created for the PKZIP and PKUNZIP (.ZIP) utilities is the main archiver and compression program for all PC based files. Since it is very well known, I won't discuss it much here. There are a number QL utilities for both ZIPing and unZIPing. ZIP and InfoZIP are the two that I know of. Both work well and will handle any ZIP file.

GNU ZIP

The GNU folks have come up with their own version of a archiver and compressor called GNU ZIP or GZIP. GZIP is very popular in the Unix world. GZIP files end with a .GZ extension. GZIP uses a different ZIPing format than PKUNZIP, but I believe it can read and write ZIP files. I've only used ZGIP on .GZ files, so I can't say that I'm correct on this. GZIP has been ported to the QL from the Unix source. The QL version of GZIP will both read and write .GZ files.

TAR

Another Unix file format is a TAR file. TAR is short for Tape ARchive. It does not compress files so much as it puts a bunch of files in one big file. TAR is used to distribute software and

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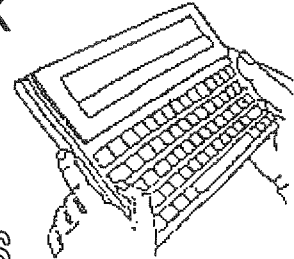
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is used in conjunction with GZIP and with Compress. Compress is the original Unix compression program. Its files end with .Z. You will often see files that end in TAR.Z or TAR.GZ. These are TAR files that have been compressed with Compress and GZIP. TAR has been ported to the QL and will both read and write TAR files. I don't believe Compress has been ported to the QL (at least the Unix compatible version). If you are getting a TAR file, get the one that ends with .GZ.

Graphic Files

In the early years of home computers, each computer had a different way of storing graphics. Most computers could save a graphic image to tape or disk. Getting graphics from one computer to another was almost impossible. Then came the standard graphic formats.

RLE

RLE is probably the very first standard graphics file format. RLE stands for Run Length Encoded, which is how the graphics were stored. RLE only supported black and white graphics. Using RLE a picture could be created on a Commodore 64 and displayed on an Apple II. RLE is over 10 years old and has not been popular since the late 80's. If you run into some older archives you may run into an RLE file. Many years ago an RLE viewer was written for the QL. I used to use it sometimes. In fact my first QL to QL modem transfer was of a couple of RLE files.

GIF

GIF was a portable color graphic file format created by CompuServe. Once introduced, it took a few years to become popular. From the late 80's until the mid-90's it was the predominate graphic file format. It is still very popular and is used heavily on web pages. Most of the small graphics you see on web pages are GIF images. GIF had compression built into the file format, so it is a fairly economical way of storing images. A number of GIF viewers have been written for the QL. I know that both UNGIF and GIFVIEW are available in distribution. If you are creating images you want to post to the Internet, ENGIF will take a QL screen file and convert it to a GIF file. Since GIF files can handle up to 256 colors, don't expect many of the newer GIF images to look all that good on a QL.

JPEG

JPEG is the most popular format for images on the Web. If you go to a site that displays full images (takes up the whole screen), odds are you are looking at a JPEG file (.JPG). JPEG is supposed to be better than GIF and have a better compression ratio. I know of one free-ware program that allows you to convert to and from JPEG format, but I don't believe it handles QL screen (_SCR) formats. There are some commercial programs, like OpenWorld, that handle a number of graphic formats including JPEG. They would allow you to both create and view JPEG files on the QL.

Sound & Movies

Now we enter an area of file formats that the QL is not yet able to handle.

Sounds

The two primary sound file formats are .WAV and .AU. For PC's, using these formats require the use of a sound card. I have seen a program that will play .AU files out the standard PC speaker, but it is very limited and rather "tinny" sounding. I can see a program being written for the QXL or QPC that will handle these formats, but I can't see it yet for the standard QL.

Movies

The primary movie formats are .MOV, MPEG (MPG), .AVI (Microsoft created) and .QT (Apple QuickTime). All of these formats require a fairly good resolution (VGA or better), a fair amount of color, and lots of processor time. Most of these movie files can be from 100K to 1 Meg in size. A five second AVI file can be about 300K.

Until there are some better resolution hardware for the QL, I don't see much need to write or port any movie software to the QL.

Conclusion

Let's say that you have only a QL with a modem and Internet access. Using a text web browser like LYNX, a gopher browser, or even just plain FTP, you can download a number of different files off the Internet and use them on the QL. You can even take your QL files and put them in "standard" file formats and upload to the Internet. Doing all of this may not be as easy as having a PC or Mac, but it can be done.

■

Professional & Graphical Software

ProWesS

ProWesS is a new user environment for the QL. ProWesS is short for "PROGS Window Manager", but it is much more than that. Apart from a new window manager, it contains all the system extensions from PROGS, and is essential if you want to run programs which need these extensions.

The ProWesS reader is a major part of the package. It is a hypertext document browser. This means that text files which include formatting commands (including pictures) and possibly links to other files can be displayed and read in this program. This is used in ProWesS to read (and possibly print) the manuals, and display the help files. The hypertext documents which are used by the ProWesS reader are in HTML format, the format which is popular on Internet to display World Wide Web pages.

Another important aspect of ProWesS is the possibility to allow programs to automatically install themselves on your system, and to be able to run them without resetting the system. This means that, when you get a new program, all you have to do is insert the disk and indicate "start the program in flp1 ", a menu option in the "utilities" button. To install a program, you indicate "install software", and the software can be added to your system. This way, you don't need to know how to write a boot file to use the multi-tasking capabilities of your computer.

ProWesS includes many programming libraries. These include syslib, an interface to the operating system, PROforma, a vector graphics system, allowing rendering both on screen and on paper (via a printer driver). The DATAdesign engine is also part of ProWesS. It is a relational database system with a bonus, as you don't even need a key field. You get a powerful record at a time data manipulation extension to the language you already use. Of course it also includes ProWesS itself, the new resolution independent window manager.

PFlist

Easy to use program to create listings on any printer (especially inkjet and laser). This ProWesS application allows you to indicate the files which have to be printed. Each column contains a footer which can include the filename and filedate. The listings always allow perforation. PFlist can create your listings in two columns and in landscape (or both).

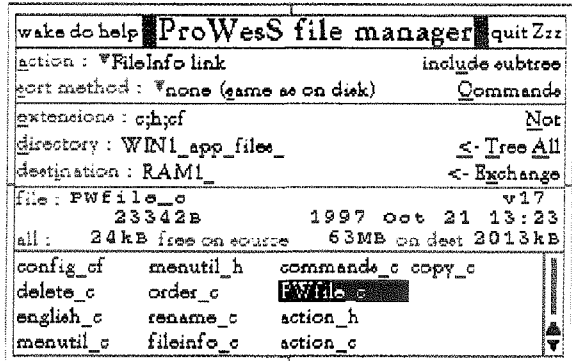
fsearch

File search utility with many useful options, like the choice to search only files with a certain extension, and whether or not the directory tree has to be scanned. All occurrences of the searchstring will be displayed with line number or offset. You can also use special matching features, like case dependent, matching a space with a stretch of whitespace, and searching for a word delimited string.

font- utils

manage your font collection. You can preview fonts on screen, see what characters exist in a font and convert Adobe Type 1 and similar fonts for use in ProWesS.

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LINEdesign

Create artistic drawings, technical drawings, process bitmaps (even scale and rotate them!), and any kind of vector drawings. You can use graphics objects to create the most fabulous drawings ever seen. Because LINEdesign is a vector drawing program, any part of the picture can be moved, scaled, rotated, slanted without any loss of precision or resolution. In LINEdesign, pictures are device independent, meaning that the printout will be the same on any printer (e.g. same size and position).

LINEdesign is good at handling text. You can easily put titles and full paragraphs on the page. All the fonts can be displayed at any size, rotation, etc. All the fonts which are available to ProWesS can be used in LINEdesign.

LINEdesign is a drawing program, but it can also be used by people who are not good at drawing. LINEdesign is a great program for making leaflets, posters, and any kind of printed work. Lots of clipart and extra fonts are available from public domain libraries and BBS's. You can even import Adobe Illustrator files.

DATAdesign

Never before has it been so easy to create, fill in and maintain your personal databases. To start a new file, just type the names of the fields. To add or delete a field, no problem, just do it. To change the name of a field, just indicate it. You can choose which fields are displayed and also which records. You can have a hidden comment for each record, look at the file in tabulated form and transfer data to the scrap or hotkey buffer. Files can be memory based (for speed) or disk based (for safety).

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You have to run ProWesS to make LINEdesign, DATAdesign, fsearch, fontutils and PFlist work (even though DATAdesign uses wman).

All our software is normally supplied on high density (HD) disks. However they can be obtained on double density (DD) disks at an extra costs of BEF 100. To use ProWesS and any of our other packages, you need a system with at least 2MB of memory. You should have a harddisk although a two disk system will also work. The use of SMSQ/E is strongly recommended for optimal use of ProWesS.

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superHermes Lite

A Review by Timothy Swenson

INTRODUCTION

superHermes LITE (SHL) is the superHermes board with just the IBM keyboard interface and Hermes features. There are no serial ports on-board and no spare I/O lines. The reason for the SHL was to provide the two primary capabilities of the superHermes (Hermes and keyboard interface) at a lower price. Although the superHermes provides a lot of capability, at 90 pounds it is not cheap. Since Tony Firshman has said that it was primarily market demand that caused him to develop SHL, I am guessing that he was getting a lot of comments from QLers that really did not want the additional serial ports or other extras.

The core part of this review will be written as a tale. It will cover the steps I made as I installed and tested the SHL. It will cover both my failings and those of SHL. Since I do not have many different types of QLs to test SHL on, this form of review is the best to convey what I really did test. As they say, "Your mileage may vary."

MY SETUP

Let me first describe how my QL is setup. This will give you an idea of my starting point and how your QL will differ when you consider buying the SHL.

I have a JSU ROM QL (Minerva is in storage and not accessible) with a Gold Card. I have a Jürgen Falkenberg Keyboard-90 IBM keyboard interface and a HERMES chip. I am using a Com-pudyne 104-key keyboard that I purchased back in 1991. Since I have a Keyboard-90 interface, I am partially basing my review of SHL on the current functionality I now have with the Keyboard-90. I know the Keyboard-90 is not a current product, but the comparison will provide additional information to the reader.

ARRIVAL

The SHL arrived in the usual poly bag (large paper envelope with integrated bubble wrap). In it was the actual SHL package with the board, keyboard interface, manual, and disk. The manual seemed a little on the lite side, especially when compared to the HERMES documentation that I already have.

INSTALLATION

Since I have installed a keyboard interface and HERMES chip before, I pretty much knew what I was going to do. I did glance over the install instructions to confirm what I should do. My QL is under a small scrap wood table that I built. This allows the monitor to sit over the QL and the QL can be tucked under the table, leaving room for the keyboard in the front.

When I installed the Keyboard-90, I was recommended to put a spacer socket between it and the QL motherboard. This meant that the case would not close on the QL. Since I was no longer using the QL keyboard, nor was anything sitting on the QL, this was not a problem. This also meant that the QL top was just sitting on the QL. All I had to do was slide the QL forward and take the top off. If you are using the QL with its keyboard, follow the instructions in the SHL manual. Plan out what you are going to do and take your time. Do not rush into this. For me, this is my only QL. If I break it, I'm in a world of hurt.

The SHL goes where the 8049 chip is; just to the left of MDV1_. If you have the 8049 chip in, be very careful when pulling it out. I'm always worried about damaging the QL motherboard. If you don't feel comfortable doing this, see if can you get a friend with more experience to help you.

I gingerly pulled out the Keyboard-90 with the HERMES chip installed on it. I did slightly bend a few pins when I pulled it out. They were easily, and gently, bent back. I then lined up the SHL over the empty socket and gently pushed down. It slowly went in and I stopped pushing when I could not get it to go further. Don't hammer it in, just be firm.

I then remembered that I needed to plug the keyboard cable into the interface. The keyboard cable has a small connector that plugs into the interface and the standard 5-Pin DIN Keyboard plug at the other end. The best way to get the cable out of the QL case is to run it through the expansion port on the left. Since I had already plugged one end of the cable into the interface, I had to run the large DIN plug out of the QL. To fit it through the expansion port, I had to remove the Gold Card, run the cable, and then re-insert the Gold Card. You could run the smaller end of the cable through the expansion port first. But I had to first remove the old Keyboard-90 DIN plug, so I was stuck removing

the Gold Card. Not a problem, just one more thing to do.

Once the interface and cable were installed, I plugged in my keyboard and fired up the QL. Now comes one thing to remember: the interface uses a driver loaded into memory on the QL. Without this driver, the keyboard WILL NOT work. The drivers are loaded at boot time, so some preparation must be made (I guess I should have mentioned this at first). Tony Firshman knew that I was getting the interface, so he set up the BOOT on the SHL disk to load the US keyboard driver. All I had to do was boot off of the SHL disk and I was fine. You can make this change to the BOOT disk before you start working on the upgrade, or you can just modify your own BOOT from the start.

The BOOT on the SHL disk worked just fine and I could use the keyboard. I then copied the driver over to my BOOT disk and added it to the BOOT program.

problem over with John, he mentioned he had had the same problem with the superHermes. He used the other US driver AM. I loaded this driver and I had my keys came back. I then realized that I should have read the file UPDATES_DOC to get this information. I read the file later and there was the information I needed. Lesson One: Read all of the manuals.

I also mentioned to John that the NumLock key defaults to ON and not OFF, which I prefer. John mentioned that all I had to do was run the Config program on the driver and I could change this. After I read the manual, I saw the one line mention of using Config to change the defaults. Lesson Two: Read all PARTS of the manuals.

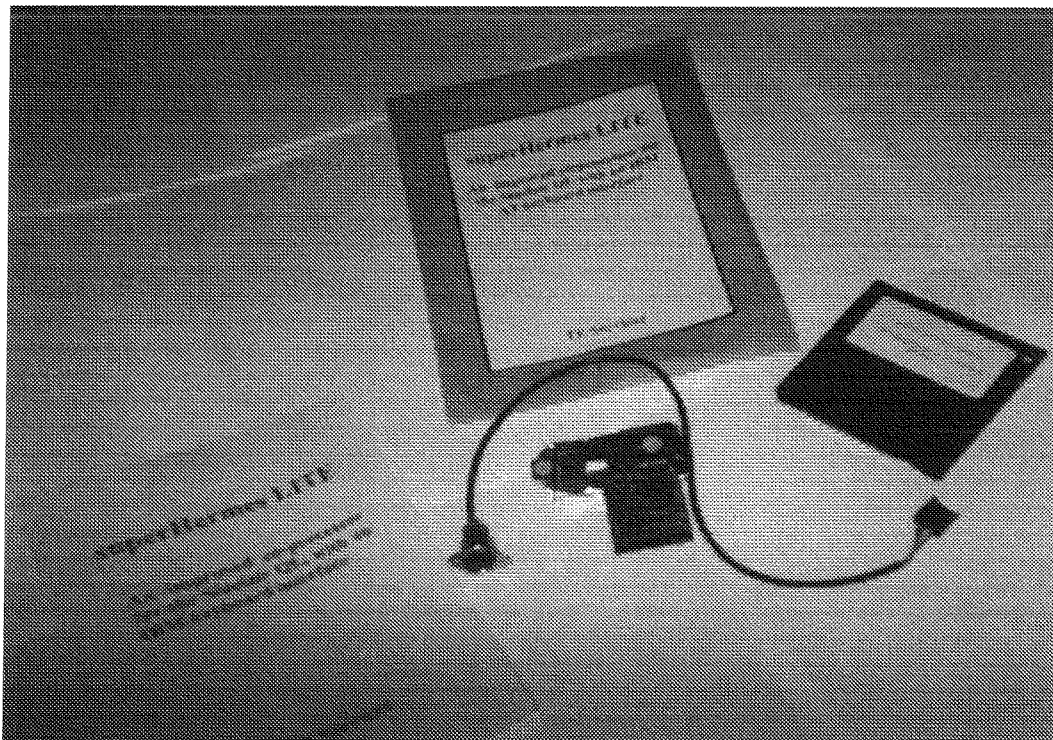
To really test the interface, I ran a couple different programs that I use and used some of the IBM specific keys to see how they were mapped. In ED, the PgUp and PgDwn keys scroll the screen on the Keyboard-90, but do nothing

on the SHL. The Insert key when used in Archive would recall the last command. On the SHL, it now pops up the Pointer Environment mouse cursor.

There is an additional document included on the disk called KEYBOARD_DOC. It details how you can change the layout of the keyboard using an included program. Essentially

you determine what keycode the IBM key press generates and you can then set what QL key will be sent to the QL. This makes the SHL very configurable. The down side of this is that, for me, I have to go in and configure these keys myself. The documentation for this is not the easiest to read. It will take the average user a few readings before it will start to sink in.

For this review I did not try to configure the keyboard. Ok, I'm lazy and only configure things



TESTING THE INTERFACE

Now came the main test, did I still have all of my keys? The ones that had caused problems on the Keyboard-90 were the backslash (\) and Tilde key (~). Using the US driver supplied these keys were missing. I started to worry. I thought I would call Tony and ask him what to do next. To confirm how to dial internationally, I called John Impellizeri, because I knew he must have called Tony or his BBS at one time. In talking the

when I really need to. I will configure them, I just need to sit down and read KEYBOARD_DOC and give it a try.

One important thing I did notice about the SHL is its speed. I'm a fairly fast typer. I spend all day working on a keyboard and I can type in short bursts fairly quickly. I have noticed that during these bursts of speed the SHL can miss a key. To test this further, I depressed a bunch of keys on the keyboard at once, sort of like hitting all of the home keys at the same time. The result was that only 1 or two characters would be sent to the QL and the second character would take a half second more to get to the QL. After doing this a few times I thought I had locked up the keyboard since any key I hit did not get to the QL. I then noticed that if I stopped typing for a few seconds, everything was fine. I'm guessing that I sort of flooded the interface and it has to catch up with what I was doing, ignoring the spurious key presses.

This delay was very apparent the first time I used the CAPS LOCK key. When I hit the key, I then started typing. All that happened was the CAPS LOCK key light kept turning on and off, as if the interface interpreted my key presses as the CAPS LOCK key. When I now use the CAPS LOCK key, I wait until the CAPS LOCK light comes on, then I start typing. This can really slow you down when typing.

THE BIG FIX

This review was initially sent to QL Today and to Tony Firshman for review. Tony noticed the problems I was having with the speed and mentioned that he had no problem at all with his system. He did some re-looking at the interface and realised that a couple of connections that might be needed were not on the SHL board, even though they were on the SH board.

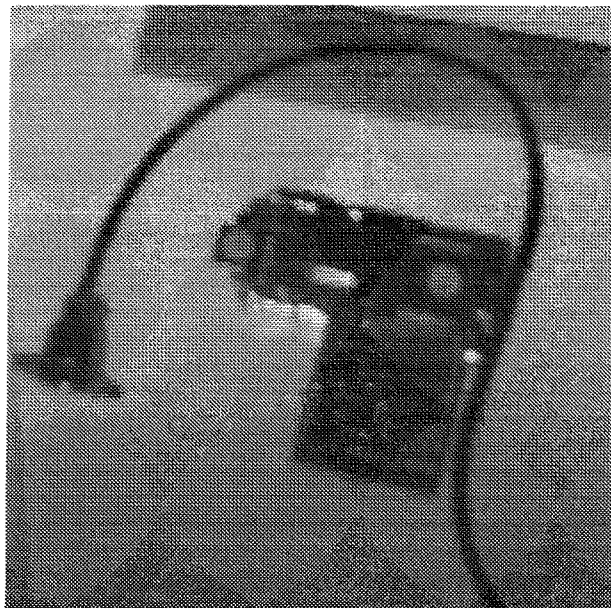
I initially tried to do the hardware mod myself and totally botched up the job. Tony now knows that when I said I was not a hardware person I was really telling the truth. So, Tony sent another SHL and an additional keyboard, thinking that I might have one of the few keyboards that were incompatible. I then installed the new interface and keyboard to finish the rest of the review.

The new board totally removed the problem with the CAPS LOCK key. Even though the CAPS LOCK light does not instantly come on, the CAPS LOCK key takes effect immediately.

The issue of hitting a bunch of keys at once and swamping the interface is also gone. I have noticed something new that I did not try out on the old interface. If you hit the A key and hold it down and then quickly hit the D key, the QL will get another A character. This is fine, since this keyboard combination is truly undefined and something that you should not be doing.

I still find the keyboard slower than the Keyboard-90. I am a very fast typer and I find that the SHL keyboard can occasionally miss a key when I hit two keys almost simultaneously. Now, I spend 8 hours a day playing with computers and typing short commands very fast. During normal typing I have no problem with the SHL. I don't expect most QL users will be as fast a typist as I am.

One key press I do miss that the Keyboard-90 has is Ctrl-Alt-Delete. This is the key press that reboots all MS-DOS computers. Jürgen Falkenberg used it on the QL to also reboot. I really like the ability to reboot the QL from the keyboard instead of having to reach around to the side of the QL to hit the reset button. The SHL documentation mentions that the Minerva reset Ctrl-Alt-Shift-Tab will not work due to conflicts with the (Super)Gold Card.



IMPROVEMENTS

Here is my list of improvements I would like to see in SHL:

Keyboard Speed: Very minor problem with very fast typing.

CTRL-ALT-DEL Key: It would be nice to be able to do a reset this way, but in talking with

Tony, he said that this is not possible. Documentation: The SHL documentation I got was only 8 pages and had only a small portion of the HERMES manual. The manual needs to be expanded, adding the UPDATES_DOC and KEYBOARD_DOC files, and to re-work the section on how to configure the keyboard. It also needs to set its audience as the general QL user and not the more experienced. I know manuals can be expensive, so at the very least, provide no hard copy docs and have a good manual on the disk. This problem is being worked on as we speak, as I have volunteered to write the SHL manual as I would like it to be, and will provide it to Tony for inclusion on disk.

MY CONCLUSION

My conclusion is based on having the Keyboard-90 and the SHL. Which do I prefer? This is based purely on my needs. I really like the Keyboard-90 and the CTRL-ALT-DEL reboot feature. Luckily it is already configured with the keys as I like them. If I wanted to change the configuration of my keyboard, I would move to the SHL. I'm not one to make too many mods or configuration changes, but when I do need to change something I like the ability to make the change. The SHL give me that capability, where I never had it with the Keyboard-90. If I did not have the Keyboard-90 the SHL would very easily fit my needs.

The lightness of the manual and the need to read over KEYBOARD_DOC a few times is fairly typical of QL manuals, but I'll give my best shot in trying to fix it for SHL.

YOUR CONCLUSION

If you do not have an IBM keyboard interface your two choices are the Di-Ren and superHermes (LITE) interfaces. Of course, the two interfaces can only be compared when the Di-Ren interface is combined with Hermes. Remember, you do get all of the serial port fixes with SHL. I believe the Keyboard-90 is only available used and not now in production. Having never used the Di-Ren interface I do not know how it compares with the superHermes interfaces. For almost every user, the SHL interface should work well, especially if you are not a fast typer as I am. The configuration issue can possibly be worked out by getting a group together to set up one configuration that they

can then share. Or different users could document their configuration and make it available to others. If you consider yourself a computer novice (no matter how long you've been using the QL), then you might want to think about how much configuration you will need to do.

SUMMARY

The superHermes LITE works as advertised.

FOOTNOTE FROM TONY FIRSHMAN OF TF SERVICES

The 'Hermes' included with superHermes Lite is in fact an improved Hermes, i.e. completely independent sound (SER1/2 input is completely unaffected) and SER1/2 input is now full 19,200 bps throughput, which matches the output speed. The reason why I labour this point is that with superHermes Lite the user can get full 14,400 speed for zip file download, which is not possible with ordinary Hermes (and 19,200 for text download using the modem's V42bis compression). This partly makes up for not having the full SER3 from the more expensive version of superHermes. In all, this makes it quite an improvement I think.

Sorry about the picture quality - the photographs were not sharp. At least you can imagine how it looks - Editor.

Q-Count Review

Q-Count reviewed by Jonathan Hudson

Accounting for my sins ...

Q-Count is a pointer driven home accounting program for SMS/QDOS computers. The program is written by John Miller and marketed by QBranch, (qbranch@qbranch.demon.co.uk), at a price of £25.00.

I cannot do better in describing the program's intended purpose than quote from the manual introduction.

"Q-Count is a home accounting suite of programs for the QL and QL-related computers. It enables the user to create one or more accounts to store transactions in, together with all the necessary facilities to add, change and delete transactions.

Account balances are kept up to date, and transactions can be verified against bank statements, etc. Full or partial account summaries can be viewed, or graphs shown of account balances or income over time. Accounts can hold money, or units, such as shares."

crash the configuration program and to save configurations that cause the main accounts program and the qconfig program to crash. In this case it is possible to edit the configuration file using a text editor to save the situation, but this is not really satisfactory for a commercial program.

The author claims that the program provides a simple to use interface, provides almost no constraints on the user and that mistakes can be easily corrected.

The program is supplied on a DD floppy disk, and is supplied with a twenty A4 page manual (printed on an inkjet). The ancillary software required to run the program is also supplied, including the customary Pointer Environment (PE) files, the DataDesign engine (this manages the data), and, for QDOS users, Hans Lub's NPIPE driver is included. The manual does not explain that the NPIPE software is free and the NPIPE manual is not supplied.

The author claims to have tested the program on SMSQ/E, and states "JM, JS, and MGx versions of QDOS, and MINERVA may all run Q-Count satisfactorily". My experience is that QDOS (JS and Minerva), may not run this program correctly. My test platform was a Minerva/Trump Card QL and an 8Mb uQLx system running Minvera 1.97 or JS. uQLx is an exceptionally stable and reliable platform that runs all other QDOS software I have tried, without problem.

Installation

Q-Count is not copy protected (however each copy has unique serial number that appears on the supplied disk). It is installed by copying onto a blank disk (or hdd subdirectory), manually making any BOOT file changes required, and running the Q-Count configuration program. It is worth reading the configuration section of the manual carefully, as the program contains very little error trapping; the red Qliberator error box can appear frequently. It is possible to both

Figure 1 shows the Q-Count configuration program; heed carefully the warning. For my HP Laserjet 5 I did not want a printer initialisation string, so I

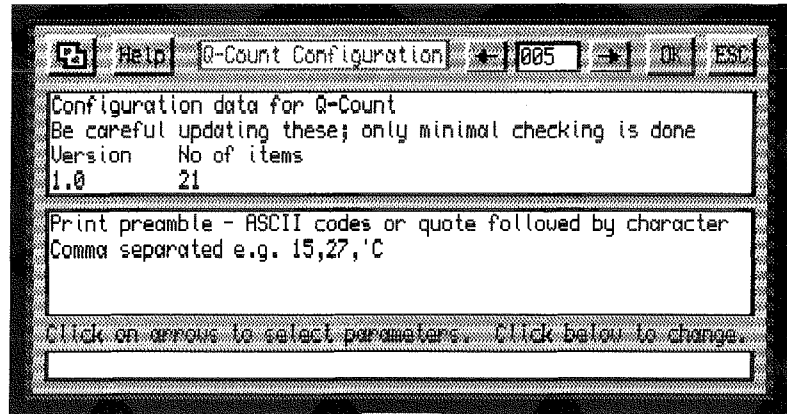


Figure 1

out. If I save this, then reloading it will crash either Q-Count_qconfig or the main accounting program. If, instead of just pressing Enter once to confirm my choice, I pressed Enter twice, then the config program crashes (Figure 2), with the loss of any other changes.

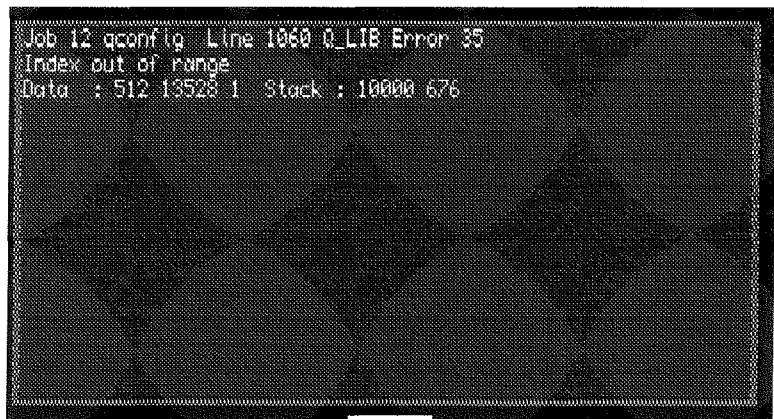


Figure 2

You must also be aware of the way that Q-Count stores and amends its config files. The file is copied from disk to ram1_ and edited there. When you save the file, it is **only** saved to ram1_; you must **manually** copy the file back to disk if you wish to retain your changes on reboot. This is even more irritating as the program doesn't warn of missing or invalid config data; you just get the potentially misleading QLib error box, usually followed by a crash.

When I first started this review, I ran the config program to change the data directory to `win3_qc_`, then started the main program. Some time later, I closed down Q-Count (or it crashed), without manually copying the config data back from `ram1_` to disk. On reboot and running Q-Count, instead of getting a polite message to say it could not find some files, I got the very confusing message shown below (figure 3), which meant I then wasted considerable time working out just what was wrong.

What's wrong with telling the user that the program can't find some files where it expects to find them?

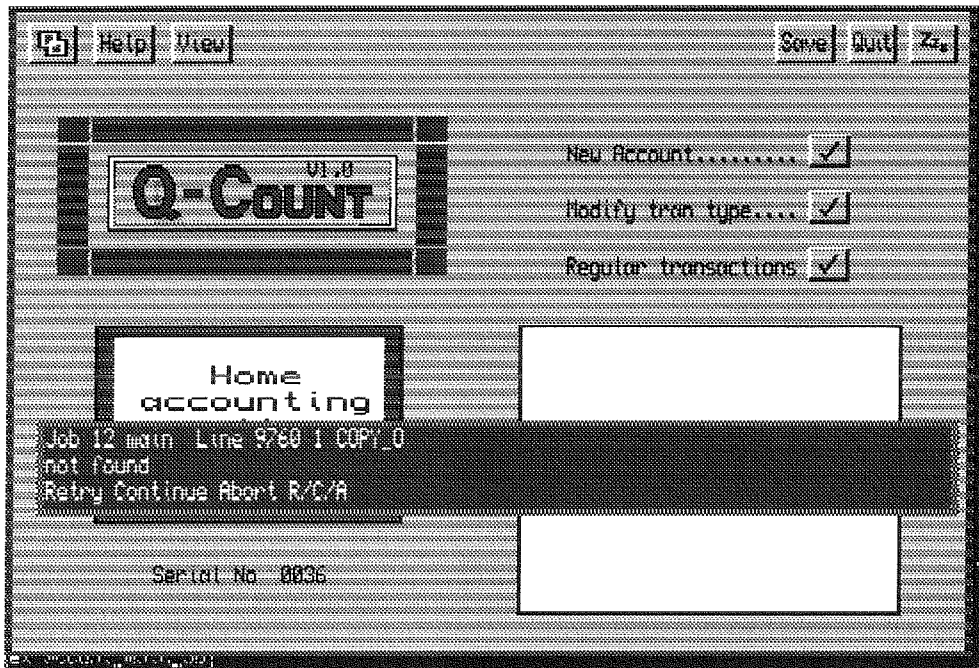


Figure 3

Using the software

After all the previous tribulations, I hoped using the software would be trouble free, even if the omens were not particularly good.

The program claims to offer a number of attractive features, including regular transactions, full and partial account summaries, and graphical representation of data. Facilities are provided for for accounts dealing with either cash or units such as shares.

Unfortunately, due to the somewhat unstable nature of Q-Count, I was unable to experience all of these facilities. It was possible to enter 'one off' transactions and view the account, both in list and graphical format and I was able to check that program appears to cope with the transition through the year 2000.

I was also able to use another useful facility, the ability to transfer funds between accounts, for example a current account and a saving account.

I initially thought that the 'regular transaction' did not work at all; however later testing showed that it 'sort of' does, just once, and then requires you to 'Rjob' the program. It is so slow that it is un-usable, at least on the GC/SGC class system tested.

I entered a 'regular transaction' to debit an account by £10.00 on a particular date each month for a 12 month period. On entering the transaction data I was greeted by the PE 'No

Entry' symbol for a period of over 30 minutes; after which I lost patience and RJob'ed.

On restart the program recognised that debits

were necessary for months January through July and informed me accordingly. It was possible to see these debits, either in lists or graphically. I then returned to the 'regular transaction' screen and was again greeted by the PE 'No Entry' icon, which again remained for over 30 minutes, until I lost patience and Rjob'ed (consistent at least). It was not possible to enter another 'regular transaction'. As many users would wish to monitor such transactions as direct debits, perhaps for utility and mortgage payments, then this is a serious defect. Once a single 'regular transaction' has been entered in this way, then this feature becomes unusable.

Having forcibly terminated the program twice, my next action was to choose the 'Audit' facility to verify the integrity of the database. This offers two options, and I chose the most strenuous to test the integrity of all Q-Count files. On the uQLx system, the emulator window disappeared, the equivalent of a complete system crash. I retried this under the Unix symbolic

debugger, which confirmed that the Q-Count program was attempting illegal memory accesses. I then attempted this operation on the 'real' QL system. I was soon rewarded by solid disk lights and a tweed screen. Oh dear, I hope your financial data is not important. Yes, the expected system crash happens here too. On other occasions this option either appeared to work, or just locked up the program.

In the course of producing this article, over a period of a week, I had at least six complete system crashes attributable to Q-Count.

While I cannot, in these circumstances, provide a full review of Q-Count's functionality, there follows a brief taster of the facilities that the program tries to offer.

(and thus lock up the program). The 'update' function allows you to update account details. Figure 5 shows this screen. The '2xEntry' icon invokes transfer between accounts, and this was used to create the 'Fiver' transaction that transferred £5.00 from the 'cash' account to the 'Savings' account.

You can view this account information graphically using the 'Graph' function. Figure 6 shows an example of this. The July figure shows the correct final balance of that month, but why are the following months less? The answer is quite simple

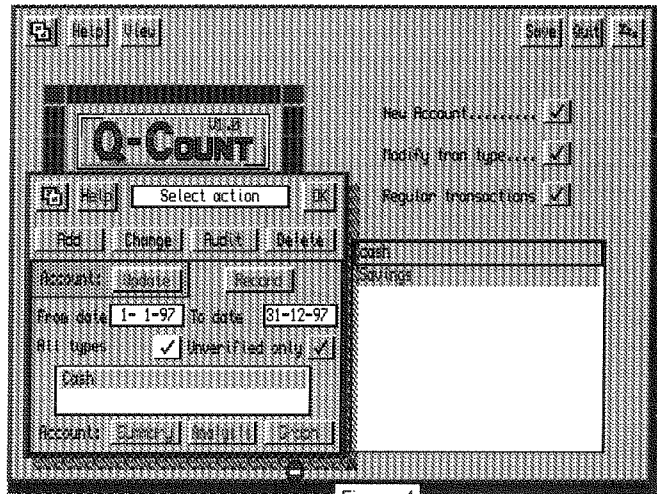


Figure 4

... I'm spending again, and going back to the 'Update' screen allows me to see this. Figure 7 shows the screen again, with the accounting period set to one year.

The two accounts were created using the 'New Account' option from figure 4. It was rather unnecessary to have to confirm an 'OK' box twice to acknowledge that the program had created the account and an index file; far more useful to have to acknowledge errors.

You will note that 'Graph' screen has an 'Export' option, allowing data to be exported to Psion programs, or with a little user effort afterwards, to more modern ones. It's again an example of the lack of detail that the program hardcodes the saved file name to ram1_QCountxxx_exp (xxx = 3 digit number)

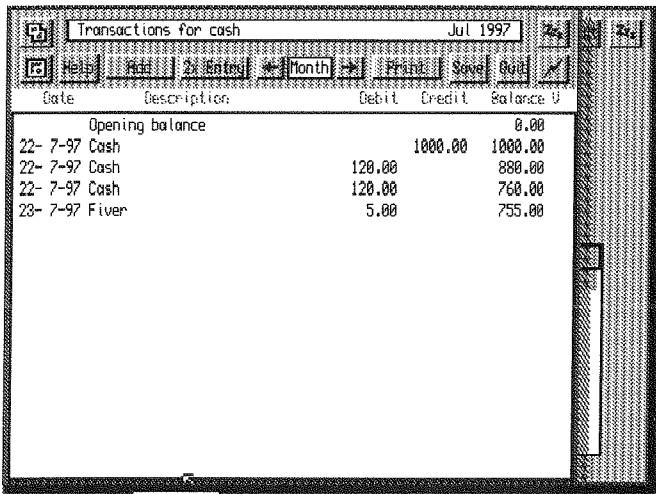


Figure 5

Figure 4 shows the normal opening screen and the account update window. The two accounts I've defined as shown in the right hand list as 'cash' and 'Savings'. By clicking on this area with the RMB (right mouse button), I've invoked the menu (shifted to the left) that allows me to edit or view the accounts. Something I did find a little confusing on this screen are the three 'tick boxes' (upper right). The boxes do not indicate that these features are enabled, but are the icons you must click on to invoke that function (for example, click on the lower item to invoke the 'Regular transactions' screen

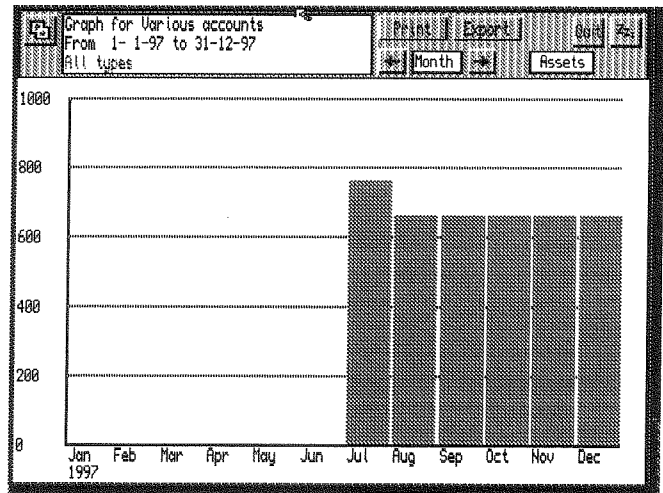


Figure 6

rather than giving the user the choice of where to save the file (maybe using the Menu extensions). Less forgivable (details again), is that the program will overwrite previously saved files without warning the user.

Date	Description	Debit	Credit	Balance U
	Opening balance			0.00
22- 7-97	Cash		1000.00	1000.00
22- 7-97	Cash	120.00		880.00
22- 7-97	Cash	120.00		760.00
23- 7-97	Fiver	5.00		755.00
23- 8-97	Spendit!	100.00		655.00

Figure 7

not have the exact platform the author enjoys). While one might forgive freeware and PD programs for not being tested on a range of hardware, this is less acceptable for commercial offerings. Contrary to the author's expectation, it does not appear possible to run the program on JS ROM. If hardware restrictions do exist, then the distributors should make this clear in their advertising. The documentation currently claims "Q-Count is a home

Conclusion

When the editor asked me to review this program I was rather looking forward to the experience. My recent SMS/QDOS experience has been almost exclusively with the 'freeware' scene and I was interested to see what the commercial market offered.

The program, as tested, is not particularly stable and usability suffers. The Qlib errors experienced demonstrate a lack of error testing and data validation and I'm rather disappointed that that the author's and vendor's quality procedures allow software in this state to be presented for review and to the market. I had hoped to be evaluating the usefulness of the program's advertised features; not experiencing 'beta test' bugs and system crashes.

Unfortunately, I cannot recommend the purchase of the software in its reviewed state. It has the feel of rushed software that is some way from release quality. However, with some attention to these faults, it has the potential to become a useful product.

I would, (presumptuously and respectfully), suggest to the distributor and author the following:

- Basic product testing and vendor's acceptance testing should be thorough enough to prevent programs that lock up or crash the system from reaching the market.
- Basic data validity checks. The program should trap data errors and inform the user how to rectify the problem. It is really not acceptable, in a commercial program, to be presented with a low level and incomprehensible QLib error message.
- Comprehensive testing on a variety of common platforms (many potential users will

accounting suite of programs for the QL and QL-related computers".

- Performance. Where the program was able to complete operations, it was (subjectively) rather slow (for example compiling a summary of an account containing only a few transactions). For a large account, this might be tedious.
- The program should be capable of maintaining its own database. The manual currently suggests that the user may need to purchase the DataDesign program and learn enough DataDesign to "inspect and correct the relevant databases yourself".
- If the user is really expected to maintain the database through DataDesign, then the manual should at least document the database schema in detail.
- The program should be complete. Several options in this release return a 'Not yet implemented' message.

I am disappointed that this review has ended up rather negative. The ideas presented in the program manual and the potentially attractive and intuitive user interface demonstrate that the author's understanding of the subject is comprehensive and this understanding is intended to be presented to the user in an easy to use manner.

The examples that I was able to investigate (Figures 5-7) illustrate the program's obvious potential; unfortunately this is let down by a lack of basic software engineering, attention to detail, and inadequate testing.

The program documentation is adequate, but could be much enhanced by including more white space, some screen shots, a table of contents and, please, an index; the cramped presentation made finding information difficult. A tutorial, particularly of the 'units' facilities, with

example screen shots would be a useful addition.

I trust that John Miller and QBranch will be able to overcome these difficulties and that Q-Count may become a reliable and useful addition to the SMS/QDOS portfolio.

Note: This article is ©Jonathan Hudson (jrh@jrhudson.demon.co.uk) and may be freely copied and reproduced.

John Miller, author of Q-Count, responds to the review:

I must say I was very disappointed that Jonathan Hudson had as many problems as he seemed to get, particularly after 18 months work on development, all my testing and all the testing that you arranged. I think that an average user, once successfully set up, would get far fewer problems.

Jonathan encountered some problems due to me, such as the failure to trap an error on a file copy when he'd got an incorrect configuration file, and his problem when blanking out a parameter, which I expect is a fault in my code. These can both be fixed, although I do not think them stoppers.

Much more tricky are the problems that he experienced with the regular transactions, and with the audit function. Your problem with "no last record" falls into the same category. These are problems which I have come across, and I have spent most of this year attempting to remove or minimise all of these (with mixed success). I believe that most of these are directly or indirectly due to Data Design. However, they are mostly not reproduceable, occur under different circumstances, and are thus very difficult to trap, and debug. PROGS have been very helpful when I have been able to provide a small demo program to show a fault, and provided a quick fix, such as when I showed that "index delete" did not function. I suspect much of this is due to a very small number of users of the SBasic interface to Data Design, and hence little experience in its use.

Since I have not been able to reproduce the errors consistently, I cannot be certain that the faults are in Data Design or, less likely, in Q_Liberator. As with most programmers, I always suspect my own code first, in the event of a fault. After six months of my spare time on these problems, I am reasonably certain that my SBasic code is not the prime cause of these faults. Unfortunately, I am unable to trap the errors. It is

interesting that Jonathan was able to determine that Q-Count was "attempting illegal memory accesses" (which I am unable to check). Since there are no direct memory accesses (such as peeks or pokes) in my code, this suggests a fault in one of the underlying pieces of code on which I am dependent. These problems can occur on any system, and Jonathan is incorrect in suspecting that Q-Count won't run on Minerva or JS (I've run it on both), but he may hit these problems on any platform.

I have been able to produce SBasic code which bypasses some of these problems (mostly inexplicably), but this is very hit and miss. Later releases will improve the situation, particularly if users and techies like Jonathan can help trap causes. Which brings me to Jonathan's main point - is the suite stable enough to be sold? Obviously, I think that the answer is "yes", on the grounds that once set up, it can be very useable without problems, and that recovery in the event of a problem is relatively straightforward. It is certainly no worse than Prowess or Linedesign, as I have recently experienced (see also first paragraph!), both of which are written by experienced programmers with total control over their code. As an SBasic programmer, I am wholly dependent on Data Design code, Q_Liberator, Easypointer, etc., and am perpetually grateful to the authors of these, without whom Q-Count and other products would not be produced.

My decision to release in mid 1997 was also partly driven by the rapid reduction in "QL" users as useful applications became rarer, and the PC world beckoned. At least Q-Count gives some people an option.

In summary, I am grateful to Jonathan for his review; I think it is unfortunate that he experienced as much trouble as he did, but still feel that Q-Count is a step forward for the QL market and those users to whom it is aimed. Doubtless it can (and will) get improved, but much depends on an ability to pin down reproduceable problems, and identify the cause, or a work around.

Screen Viewer

Review by Dilwyn Jones

SCREEN VIEWER V2.10, written by Andrea Carpi, Vercelli, Italy.

This useful little graphics viewer program was drawn to my attention by Anthony Trice from the U.S.A. during correspondence we exchanged on

another subject. This Screen Viewer program is Postcardware, meaning that if you use it, you should send the author a postcard, but you don't have to pay for the program, and you can freely give copies away to other QL users.

It is a pointer driven graphics viewer, which works with both screens and the pointer environment area save bitmap files (so-called _PIC files). It works with QL screens (512x256), EGA screens from QXL and QPC (640x350), VGA screens from QXL and QPC (640x480), SVGA screens from QXL and QPC (800x600) and 1024x512 screens from Aurora, but not 1024x768 (Aurora) or Atari extended Mode 4 screens. I haven't tested the other intermediate Aurora display mode resolutions.

When I went to try to view some PIC files I had converted with my Convert-PCX program, I ran into a problem when viewing mode 4 files, which caused a Bad Parameter error in the Screen Viewer. The official format definition for PIC files says that the mode number should be 0 for four colour mode, whereas certain graphical programs (including Convert PCX) insert a mode number of 4. Normally, this makes little difference as most programs cope with either MODE 0 or MODE 4, but Screen Viewer doesn't. A quick and easy way of making the necessary change to the PIC file is to use a single line of BASIC

to alter the mode value, this requires Toolkit 2:
 OPEN #3, filename\$: BPUT #3\8,0 : CLOSE #3
 When this change has been done, the Screen Viewer copes with the file. Perhaps this is a

modification the author could consider making, to cope with these non-standard files.

Qubbesoft P/D, Quanta and Steve Johnson's libraries of QL clipart contain a large number of QL screens in compressed format, using a method of compressing graphics I devised a few years ago. Sadly, neither this format, nor The Painter/The Clipart (PROGS), nor Eye-Q compressed screens can be viewed.

That's covered the negative aspects of this program. Now for the good news, and there's plenty of it.

The program is very easy to use and well thought out. Files can be viewed by passing the filename to

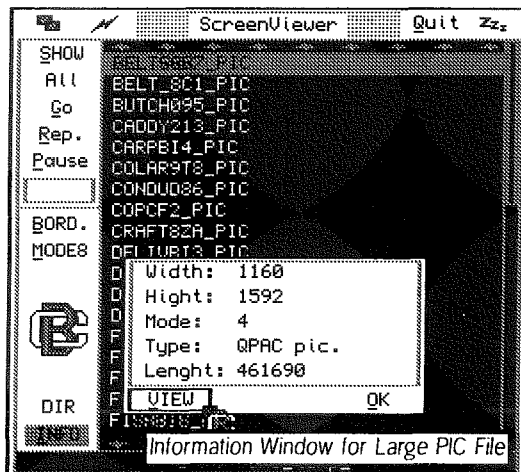
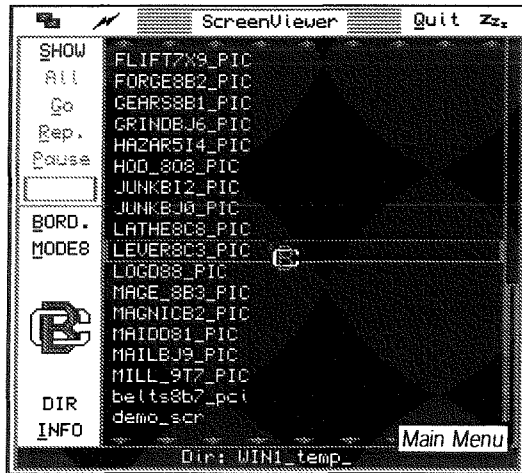
the program as an option command parameter (a name in quotes or as a string after the program name in an EX command) allowing it to be used to view screens from QPAC2's Files menu if you use FileInfo 2 (which was supplied on QL Today's first cover disk). The file type is automatically determined (i.e. it knows the difference between screens and PIC files), and for PIC files it knows the MODE number by looking

in the file preamble bytes, but it has to ask you to tell it if a screen is MODE 4 or MODE 8, as those sorts of files do not include information about the mode number within the file.

Files can also be viewed from a menu within the program, the best method for a stand-alone program.

There are in fact two separate viewing methods in the main menu.

Firstly, if you just HIT or DO on a picture filename, the program loads it and displays as much of it as will fit on a screen. Optionally, you can place a border around it. If you then HIT on the



picture, it returns to the main menu for you to view another picture. Or if you DO on the picture, the program goes into pan and scroll viewing mode. Simply moving the mouse or using the cursor keys are then all you need to do to view the remainder of the picture.

Secondly, SHOW mode allows you to mark the filenames of as many files as you want to view, then HITting GO starts a 'slide show' of these files. You can specify a pause delay between pictures, or a value of 0 will leave the picture on screen until you press a button to continue. You can also optionally repeat the slide show automatically, pressing ESC to stop it and return to the menu.

The program has the usual move, wake and sleep icons. In addition, there are loose items you can click on to get the program version number, author details and Beginners' Club address in Italy.

The Info option allows file details to be displayed when you HIT a filename in the main menu, showing such details as the picture size in pixels and mode number if known for a PIC file. Info also allows suitably sized pictures to be converted between PIC and screen formats via an extra loose item under the information display, and there is also a view option.

If you are a hard disk user, you are likely to have your clipart tucked away in one or more sub-directories on the drive. HITting the DIR loose item (or pressing F2) brings up the DIR SELECT menu from the Menu Extension to allow you to choose the current directory, e.g. if you keep your clipart in WIN1_CLIPART_, you'd press W for WIN, 1 for drive 1, and then select the directory from the list shown. When you change directories in this way, the program appears to alter the DATA_USE default data drive setting - PRINT DATAD\$ from BASIC shows this to be the case, although the viewer restores the original default on quitting. Since you can press ESC to abandon some of the options, quitting from the program uses Q for Quit instead to avoid accidentally quitting prematurely from the program. A nice little touch.

Some of the loose items in the main menu have non-obvious, but fairly easy to get used to, key presses. If you use the mouse to select the commands, no problems, but you need to remember to press F2 to get the directory selection window, for example. The standard icons for Move, Sleep and Wake are all present and use the standard key presses for these commands found in most programs.

The program requires the use of Toolkit 2 and the Menu Extension file called MENU_REXT supplied with many pointer driven applications such as QD and QMenu from Jochen Merz Software. Screen Viewer is only about 43 kilobytes long, so won't take up much room on a floppy disk or hard disk. It works on QXL, QPC, Aurora and a QL (with expanded memory). I don't

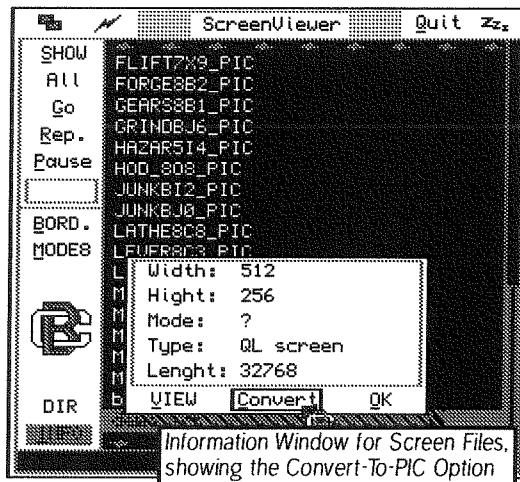
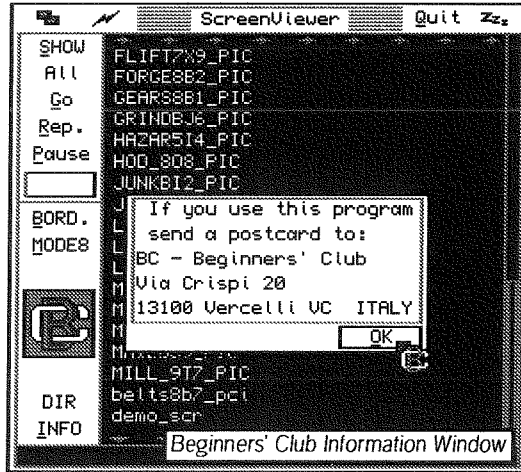
have any other emulators on which to test it. The program is QLiberator compiled, using Easyptr 3, but all necessary code files are linked to the program, so you do not need to own either QLiberator or Easyptr to be able to use Screen Viewer.

This is definitely a program I'll keep on my hard disk, since I'm an avid user of clipart on the QL. The program is easy to use and can be mastered

in minutes, especially as the instructions consist of just over 2 pages, containing the bare essentials of what the typical user needs to know. The fact that it can be used to view screens from QPAC 2's Files menu using File Info 2 is a great plus for me. What I didn't like about it was that it didn't support any compressed file format, and the fact that it couldn't cope

with the non-standard 4 colour PIC files which are quite common. It's free (apart from the postcard!), pointer driven and works on just about anything, so get a copy and send the author a postcard to say you like it (I did)!

Since this review was written, V2.17 has been released. This fixes several problems raised in the review including the handling of MODE 4 PIC files.



On the right Track - TRACK84 Review

Darren D. Branagh

The following PD program I'll be reviewing is something of a rarity - an incredibly useful utility that is actually short enough to TYPE IN, let alone order it on disk from the PD libraries - It is however available from Steve Johnson on SJPDI, Along with another couple of dozen progs on the same disk - good value or what?

TRACK84 is a must for you, if, like me, you only have a Trumpcard QL setup - which can only handle DD disks 1440/1440 Sectors). I hope to get a QXL soon but until then TRACK84 helps me squeeze every little bit of storage I can get out of my DD disks.

Basically, all TRACK84 does is format DD disks to 84 tracks, instead of the usual 80. This means you get an extra 4 tracks of storage using this method, with equates to about 36K - therefore your 720K DD disks will now hold 756K of data instead. Not a bad increase in my opinion.

Some of you will no doubt be wary of such a "bodge" - will your precious data be safe? Well,

```

100 DEFine PROCedure f84(name$)
105 a$='':b$=''
110 FLP_TRACK 84 : REMark -----SETS FLOPPY TO 84 TRACKS-----
120   FORMAT name$
130   FLP_TRACK 80 : REMark -RETURNS TRACK SETTING TO NORMAL--
140   OPEN #3,name$(1 TO 4)&'_d2d'
150   GET #3\1,a$
160   GET #3\4,b$
170   a$ = a$&b$
180   GET #3\7,b$
190   a$ = a$&b$
200   a$ = a$&b$
210   a$(22) = CHR$(224)
220   a$(34) = CHR$(4)
230   FOR i = 1231 TO 2048 : a$(i) = CHR$(255)
240   PUT #3\1,a$(1 TO 512)
250   PUT #3\4,a$(513 TO 1024)
260   PUT #3\7,a$(1025 TO 1536)
270   PUT #3\257,a$(1537 TO 2048)
280   CLOSE #3
290 END DEFine

```

I hope this proves as useful to everyone else as it has been to me in the past.



I've been using this method for ages now, on quite a few of my disks, with no problems thus far - 100% reliable. However, it could be used as an effective backup to the backup, if you don't trust this method.

Using the Program couldn't be easier - it's in BASIC. It's so easy the program doesn't even come with a _doc file or instructions - simply LOAD the program, and this defines a PROCedure called F84(name\$). Therefore keying:

F84 JOEBLOGGS

will format a DD disk in flp1_ to 1512 sectors, with the medium name of JOEBLOGGS. The program runs from flp1_ as a default, but EDITing the prog (using ED or whatever) can easily change this. Also, the fact that it's written as a PROCedure makes it easy to include in your own BOOT program.

I recently got the ANNE FRANK RESOURCE PACK by Dilwyn Jones as a few zipped files, which expand onto 2 DD disks. However, using TRACK84 I managed to get it onto just 1 DD disk - due to the extra 36K I had, and some corner cutting. TRACK84 has proved very useful.

It's so small it's scarcely worth waiting for the next Cover Disk or sending off for it - so here it is listed out for your use - even the worst typist could enter this in just a few minutes:

Pointing at Buttons

P.H. Tanner

I first used a mouse in 1984, although I had a previous acquaintance with track balls, which I consider to be superior. (Don't all start shouting at once. Has any one ever seen an air traffic controller's desk which used a mouse rather than a track ball to manipulate the display?)

For freehand on screen graphics, and the likes of CAD/CAM, a pointing device such as a mouse or track ball is essential.

Also, if used properly, the mouse is a marvellous cursor positioner, and is great for opening and sizing windows. And when I say properly, I mean that the writing hand, left or right, should continue to function as such, while the mouse is operated by the other.

In the case of a right-handed person the mouse is worked by the left hand while the right is free to write, or to use the numeric keypad. Which is splendid for inputting mass data to, e.g., a spreadsheet.

Another device with great potential is the touch screen. Small windows, emulating "buttons", are opened which, when touched by a finger or other pointing device, initiate an action. This is one of those ideal configurations whose realisation has met with a number of practical difficulties.

Ten years ago a v.d.u. with such a facility was not cheap. And a generation ago, when the outlines of the present personal computer configuration were beginning to appear, it was impossibly expensive for the mass market. There was, and is, also the difficulty that when the screen is placed at a comfortable viewing distance the buttons are awkwardly remote from the operator.

The principle is a good one, however, and a number of methods, such as the light pen, of implementing it without the need to reach out physically to the screen, have been tried. Only two have survived into widespread acceptance. To take them in order of appearance, no other ranking being implied... Yet.

A second, pointing, function may be assigned to the mouse. Besides the positioning of the cursor/drawing stylus, it may be used to select a button. Should the current mouse coordinates lie within the bounds of a button window the cursor transforms to an index pointing to that button. Confirmation of the selection of the button is effected by "clicking" a key on the body of the mouse.

The function of reaching out and touching a

designated area of the screen is thus simulated - at the cost of learning two extra skills. There are pros and cons to this, which I'll leave until after describing the alternative.

Which is an extension of the hot key system. Touching the screen is simulated by the touching of keys on the keyboard, which is suitably remapped for the purpose. As with the mouse pointer, a change of function for the keys must be engineered. This is effected by means of pull down menus, the hot keys themselves having validity only within the context of the menus.

This is excellent for touch typists, and very good for those who, like myself, merely aspire to that status. And is not bad for anyone who has progressed beyond the use of the forefinger of one hand.

There is no need for the superfluous "click": the act of touching the key also implies its choice. Neither need a new skill be learnt beyond one's existing facility with the keyboard. And, above all, it is natural.

The hybrid system, where the mouse is used to navigate the menus, is just too silly, making as it does the worst of each world.

Any attempt at the evaluation of the relative utility of the two systems comes up against the problem of the habit that users have of projecting their own virtues on to devices, and then defending them as if they were characteristics of the device rather than of themselves. Any one who has attempted the detoxification of a WordStar addict will know what I mean.

Fortunately the issue is sufficiently clear cut to preclude the need for a detailed examination.

It pains me, as a devotee of pull-down menus and hot keys, to have to say that I believe the future to lie with these wretched little buttons.

For the simple reason that ideograms are not tied to any "country". Now that the market is no longer confined to Caucasian anoraks, no software house with global pretensions is going to waste resources on language-specific menus when buttons are universal, and do not require the maintenance of alternative versions.

My Unix_phreak descendant confessed last year that he had been driven to install Windows NT because that was the only way he could continue to receive updates of the mathematical utilities that he needs.

But mouse-pointed buttons are not ideal. If they are going to take over the world then they must adjust to the realities.

Apart from the demands they make on the eye-hand coordination of the user, there are basic conceptual minuses.

Reviews of lap-top computers frequently refer to the cursor submarining, or otherwise appearing as it should not on the screen. But this should never have been a problem. Why is the cursor being used to access the buttons at all, when they are within reach of unsimulated finger tips which can press them directly?

There is also the nonsense of the on screen graphics. A line is being drawn, and the thickness of the stylus tip is to be changed. The mouse must then take the cursor away from its proper job to point at a button, which has to be clicked. And then the thing must be returned to its exact previous position. Why, oh why?

Technology has moved on since the first introduction of the clickety-clackety mouse. We now have Newtons and similar notepads which will accept direct input via their screens.

There is also a mousepad, which simulates the action of a mouse by its response to the movement of a finger over its surface. Has not the time come for the mouse to be replaced by such a pad on which the buttons are displayed, ready to be pressed directly? This would leave the main display free of non-informational clutter.

It might be that the keyboard would then disappear as a separate mechanical entity, becoming one of the possible displays on the pad. While the track ball would be confined to its true job: pointing at the information field on the primary screen. Imagine drawing on a full height and width screen, one hand on the mouse, the other selecting down/up, fill, palette, etc from a separate display. It makes much more sense.

And the function keys: they will have disappeared into limbo whither they should have been dismissed years ago. And I do not believe that any one, from either side of the argument, will shed a tear over them.

Meanwhile, until that day dawns, I have an editor, a database, a PASCAL compiler, and a word processor, each of which does very well thank you with their menus and hot-keys. And I wouldn't change them for all the mice in the world.

Until the buttons come down to my level where they belong. Then I will abandon my former love without a backward look. But I fear that I am like that. I never spare a nostalgic thought for hand-punched paper tape, either.

■

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30 Easy Ways to say No to Organising a QL Show

Darren D. Branagh

I'd love to, but...

1. I did it last time, or was that in 1986?
2. I've got to take my PC to bits again this weekend.
3. I'm helping Roy Wood and Laurence Reeves to wash their hair.
4. I'm fixing the chain on Stuart Honeyball's Miracle bike.
5. I'm too busy writing reviews for QL TODAY.
6. I'm writing a decent operating system for the PC.
7. I'm going through SMSQ/E withdrawal.
8. I'm busy fitting my Aurora in a tower case (without a Braquet).
9. I'm trying to attach those little plastic feet to my old QL.
10. My local Tony Firshman Fan Club meets then.
11. I'm too busy playing the LONELY JOKER.
12. I can't decide whether to buy a PC or set fire to 2000 punts....
13. I've got to ring the Samaritans (I just bought a PC).
14. I'm matching pairs of socks for Simon Goodwin (if you weren't at the Irish QL show, you won't understand this one!)
15. I'm trying to keep Stuart Honeyball in second helpings.....
16. I'm buying crisps for Jochen Merz
17. I changed the lock on my door and now I can't get out. *[Well, he is Irish! - Editor]*
18. I'm making a home movie called "The Thing That Grew in My Refrigerator, before Stuart ate it"
19. I'm helping the editor sort out the latest problems with his PC that weekend.
20. Doesn't QUANTA usually do that?
21. I've found an old pile of QL Worlds I want to read.
22. I want to write my bit for QL Club International..
23. I think you want the OTHER Darren Branagh.....
24. I'd only have an empty wallet at the end.
25. I'm helping Ron Dunnett with the next QL miracle.
26. I've just won my first game of QSHANG.
27. I'm too busy writing this Joke Book.
28. I'm getting my Z88 upgraded to OZ4 by Bill Richardson.
29. I'm in jail that weekend.
30. I'm going through Geoff Wicks' button frame that weekend.

Funny it may well be, but without people to organize shows, the QL would be in a bad state.
DO YOUR BIT FOR THE QL - ORGANIZE AND SUPPORT A SHOW NEAR YOU TODAY!

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Bugs 'n Fixes

Jochen Merz

A customer reported the following problem:

When I use the FILE_SELECT\$-function from QMENU and then qliberate the program, then it fails. It works under interpreted SBASIC or SuperBASIC.

After some investigation, the problem was tracked down to the following few lines:

```
100 PRINT FILE_SELECT$(,,,_bas)
110 GOTO 100
```

The first time the File-Select menu appears, the extension is shown correctly: `_bas`. From then on, every time "TYPE 0" is put into the extension-field instead of the desired extension `"_bas"`.

The problem seems to be a QLiberator-related problem. The first time, it passes a string, from then on, it passes a long integer. I do not know why, but it is quite easy to avoid this problem: put quotes around, e.g.

```
100 PRINT FILE_SELECT$(,,,"_bas")
and it will work perfectly well.
```

While writing this, I would like to mention another QLiberator-related problem with parameters as well: make sure that the last parameter is not a null parameter, like

```
PRINT FILE_SELECT$("Title",,,)
```

Just give the required parameters!

■

Letter Box

Don Atkins, Sydney, Australia, asks:

Am I correct in thinking that the Lightning suite cannot be used with QPC due to the already loaded pointer environment files, or is there a way of overcoming the 'not complete' problem? Many thanks for all the good work you put in to produce the magazine, it's great!

Answer: The screen driver which is built into SMSQ/E and QPC is much faster than the original QL or QDOS screen driver and therefore does not need to be patched with Lightning. Trying to LRESPR fortunately leads to a "not complete" error, as completing the request to install Lightning would crash the system. I am not sure but I doubt that Lightning looks at the parameters in the channel definition block to gain speed, so that it would probably not work on other resolutions than the original

512x256, let alone allow the resolution to be changed on-the-fly. If you do some timings on the same system (eg. QL + GoldCard + Lightning versus QL + GoldCard + SMSQ/E) and compare the results, then you will find that sometimes Lightning is a bit faster, sometimes SMSQ/E. In general, you will not notice any difference.

Peter Tyler, Aughton, England, writes:

I have rather belatedly read a note in the July/August issue of QL Today written by Jonathan Hudson. It is on page 29, and recognisably refers to a contribution of mine in QUANTA relating to the Line Design demo disk. I think this comment has been made before, but this time I will rise to the bait and say that I totally disagree with him where commercial software is concerned. Freeware/shareware is a different matter.

Let him note, firstly, that my original gripe was concerned with the quality of the disks themselves, and then with the compilation of the demo disk; not with any of the programs. Admittedly, I had misgivings about the documentation supplied, but then it was a demo disk. Secondly, how will the purchaser of a commercial disk be told who the authors of all the programs (and of the disk) are, and how to contact them. Thirdly, if I had contacted the author about a problem, only I would have (hopefully) been given the solution. By bringing issues into public awareness, and eliciting a response from the person accepting responsibility, a much larger user base gains, and all the author identification problems above are by-passed. This is exactly what happened in the case of the Line Design demo disk.

I would expect the normal sequence of author-publisher-retailer-user to apply in the case of commercial software. We have the likelihood that some of these roles are often merged with some products in the QL world, but the different responsibilities at each stage exist, nevertheless. If a purchaser has any reason to believe that a disk is not "fit for the purpose", then the first port of call for him is the retailer/publisher. If it had been published by the author then he would have to wear the retailers hat and see the problem from the user's point of view. This routine has worked often enough for me in the past (including a correspondence with yourself, Dilwyn), but not always. Specifically in the case of the Line Design demo disk, would I really have been expected to contact the author of one of the programs because the disk

would not boot correctly? I am surprised that Jochen Merz agrees with this. [*Jochen's comment: In my case, I am often author and distributor. That's why I was mainly saying "author", but meant "author and/or distributor". What I am saying is: better contact the author (and/or distributor) directly instead of writing your problem to publications, where it is not guaranteed, maybe not even likely that the author will read it, e.g. Maus-Net, Financial Times or The Funniest Home Videos. If I have a problem, I tend to contact the author directly, which was the fastest and best way so far: it was either me not having read the documentation properly, a bug ("inbuilt feature") or missing feature. In nearly every case it led to success.*]

The day after my contribution appeared in QUANTA, Joachim van der Auwera contacted me, and in the course of the conversation mentioned that the demo disk had been in circulation for 18 months without the problem being noticed. Fancy me being the first to find this problem. Is that what Jonathan meant by widespread apathy? No sir, the ball is not really in the users court: software products could, and should, be tried out by the publishers first. After all, it is to their advantage to get it right; particularly in the case of demo disks.

References: Peter Tyler; QUANTA, March 96, p21 Joachim van der Auwera; QUANTA, April 96, p17 (Note that the solution provided by Joachim was quite complicated in that it is reconfiguring the Proforma program. My "secret" solution was simply to copy the font files back to the demo disk without the prefixes so that Proforma, as supplied, picked them up.)

John Wakefield, Worthing, England writes:

There are three members of my household who regularly play on the keys of my QL. My wife, Lesley, mainly uses the 'Compaq with QPC', while I tinker with the new Aurora / Super Gold Card / Super Hermes / SVGA / Braquet / QBranch built tower cased dream machine. The third member, Snowy, tends to doodle a lot, and often goes to sleep when in the middle of typing something.

About two months ago, it became necessary to take my old home machine to work, because the Receptionist was experiencing a lot of crashes and lockups. The QL that she uses was playing up too. This left my desk at home bereft of amusement for Snowy and me.

My home machine then was a QL with Super Gold Card in a tower case, and since I thought it

was about time that I treated myself to some luxury, I ordered the new setup from my good friend Roy Wood.

When it eventually materialised, after some delays because Ron Dunnet was waiting for a new batch of Auroras, and a couple of days at my office, where Roy very kindly set it all up for me, I eagerly took it home.

Snowy, who was also suffering from QL withdrawal after several weeks with a bare desk, quickly took command. A long row of 'Ks' appeared on the screen. I was panic stricken at first, thinking that the keyboard had jammed, but I soon discovered that snowy had put his back foot on the 'k' and then gone to sleep.

When I told Roy about this he remarked "He can't even spell; you should tell him that 'cat' starts with a 'c'. Are you beginning to see the level to which this letter is sinking?"

Anyway, I happily played with my new machine for a few minutes, when suddenly it performed a warm reset, all on its own. Snowy was not to blame, because he was by now draped around my shoulders. I played some more, and then it happened again. I noticed that the reset occurred after I had been using the mouse (I'm not really supposed to mention mice, but I am typing this bit while he is out in the garden chasing sQuirreLs), and then made a key press.

After a phone call to Roy, and his subsequent call to Tony Firshman, it was decided to try changing the keyboard for one of the TF Services ones. My original keyboard had been around for a few years, but I had never had any problems with it. However, it was worth a try. Roy had one in stock, and he delivered it to me the next day (Wonderful service).

Snowy and I both tried it out, but the fault still occurred. Snowy even did a bum reset. Roy then decided to try replacing the 8302 chip, which has been known to cause problems when inserted into an Aurora.

Before we could do this, Tony Firshman sent a replacement keyboard connector, because he figured that there could possibly be a fault in my one. Thanks Tony for your rapid response. There is apparently a reset line in the cable, which he felt could be causing the fault. As to this reset line, I am rather puzzled. The Super Hermes cannot perform a warm reset; you have to push the reset button on the tower case. Odd, when there is obviously a means to do a warm reset lurking in the cable. Can anyone explain?

Snowy, meantime, was quite happy tapping away at the keys, despite the fact that there

was nothing happening on the monitor.

Anyway, the new lead was fitted, and sure enough, it transpired that it cured the problem. The lead was fitted by Keith Mitchell at our QUANTA group meeting, using his dentistry skills to manipulate the tricky securing nuts for the DIN socket. The KM Toolkit proves more useful than TK2 on these occasions. Digressing a bit, Steve Hall turned up (late as usual) with a new PC, and Keith fitted a QXL in just under two minutes. Is this a record?

Back at home, Snowy was now in his element, because he much prefers to take over the keys when I am sitting there too. I had decided to keep the new keyboard, because it had a good feel to it.

All was serene. I, blissfully tinkering with the latest version of Fileinfo II, which is really good, and Snowy zzzzzing, when suddenly the keyboard went dead. Oh no! I tapped around, and it eventually started working again. What can it be now?

Look out! Here comes Snowy!

ww

I do not lie. He did that; just passing through. A few spaces followed by the back foot 'w's.

Well, after a while I worked out that pressing one of the three keys, which are apparently put on the bottom row of this 'ACER' keyboard for specific use by 'Windows' (UG!), made the next keypress get lost. I probably pressed it by

accident, or perhaps it wasn't me! Pressing one of these keys twice in succession made the keyboard completely dead for several presses. This phenomenon does not seem to be consistent. However, I have thought of a really good use for the keys. When I see Snowy coming, I quickly press one twice, and his excursion then usually ends up without me having to delete his handiwork.

Can anyone tell me whether these keys are useable for anything other than temporary paws buttons?

Next, I decided to do some printing. The printer naturally would not work. Is this not inevitable whenever you interfere with something?

Roy said, try a new lead, and I did, and the printer worked OK.

My new setup still suffered from problems, which were apparently due to a dodgy hard disk. Although it was a hard disk that I had been using on a previous machine, it kept giving me corrupt sectors. After some messing about, I finally took the machine over to Roy's house, and together we managed to cure the fault. It turned out to be another duff lead. Not the keyboard lead, nor the printer lead of course, but this time the Super Gold Card to hard disk lead.

At last, no more problems. Does anyone have a spare lead for a cat?

■

Start Me Up

Jonathan Hudson

Qascade, a "Start Menu" for QDOS ...

With the editor's indulgence, I'd like to wallow in some shameless self publicity for a new utility.

qascade is a QDOS/SMS?? utility to provide the sort of functionality available from the well known RMB popup menus in Unix/X Window or, more recently and even more ruthlessly hyped, the Start Menu/Button in Windows 95 and NT 4.0.

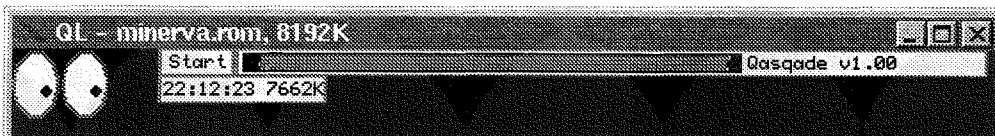
qascade appears as a button, and in the following example is imaginatively named 'Start', but the choice, as ever, is yours.

Beneath it, there are cascading, user defined menus that may:

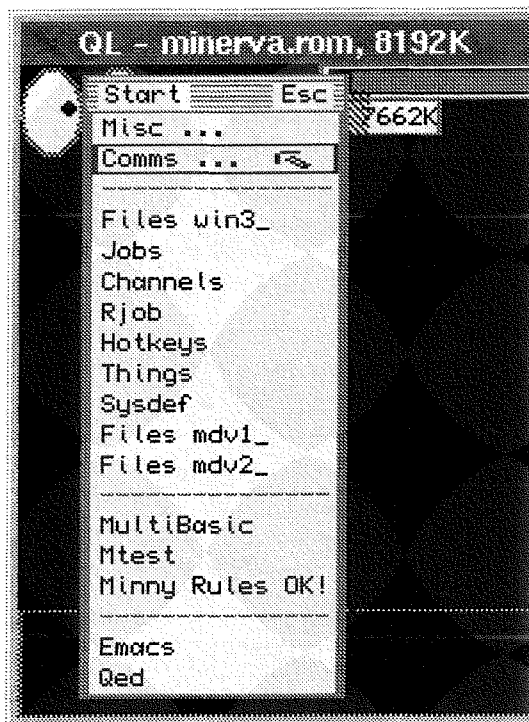
- Display a new menu.
- Start Executable programs, with optional parameters.
- Start Executable Things, with optional parameters.
- For Minerva users, Multibasic sessions, with an optional BASIC program that may be run, and with user defined device/files.
- For SMS?? users, SBASIC sessions, with an optional BASIC program that may be run, and with user defined device/files.

In extremis, a single *qascade* button might replace or augment a myriad of other buttons.

Clicking on the 'Start' button on the author's machine, displays the following menu, defined by a simple text file that can be



created and maintained with most QDOS text editors. The example menu shown was created for test purposes and may not be representative of a real setup. The example divides the menu into four logical sections.



The first section defines two sub-menus, these are denoted by the ellipsis (...).

The next section defines some executable Things. These are Things that you might otherwise have on separate buttons and will be familiar button options to (many) regular QPAC2 users.

The third section defines some Minerva tests, testing various options for either just invoking an independent interpreter or running uncompiled BASIC programs in user defined windows. Similar facilities are available for SBASIC too.

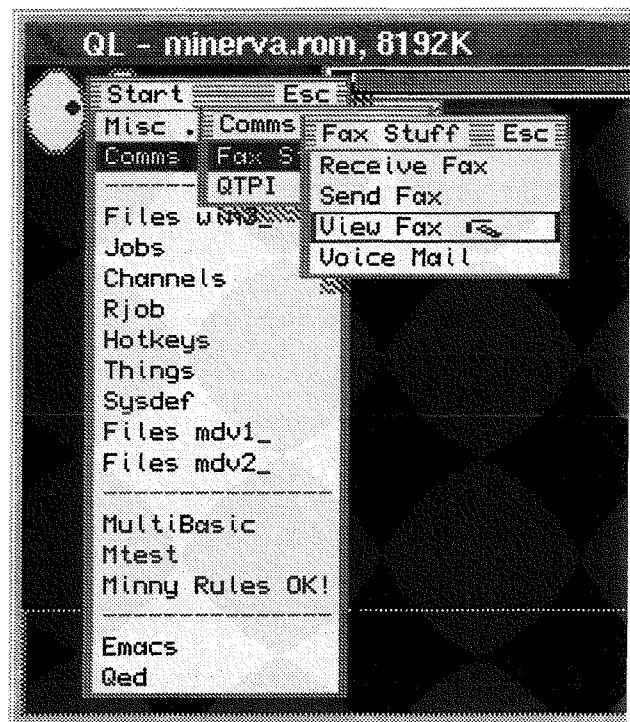
The final section defines a couple of executable programs.

The illustration shows a menu approximately the vertical size of the screen, if it were bigger, then the menu would have acquired a scroll bar.

Clicking on the sub-menu options (from the top menu section), gives access, in this example, to some further menus.

These additional menus follow the same rules as above, and in this example, cumulate in options to do some comms related things (well, executable programs if we're being pedantic).

As mentioned earlier, the menus are defined by a fairly simple text file that can be edited



easily by the user, using standard QDOS text editors, to customise the menus to suit her special requirements.

qascade is free and freely distributable. The archive includes an example menu configuration file, several Minerva MultiBasic test programs, documentation and 'C' source code (just in case you want to fix any bugs). The latest version can always be found at

<http://www.jrhudson.demon.co.uk>,

probably at other well known QDOS WWW sites and BBS and perhaps in other repositories of free software.

qascade should run on all ROM/OS versions. It requires the c68 environment variables extension (*env_bin*), the pointer environment (*ptr_gen*, *wman* or *SMSQ/E*); it is enhanced by *qpac2* (for buttons [however, *qascade* will give you a button without *qpac2*] and Things) and Minerva or SMS something (for MultiBasic / SBASIC).

If you like to access your programs by mouse (or a single hot key) but don't want to fill your screen with buttons, or maybe just to show that QDOS can work in this particular "modern" idiom, then maybe it's worth a look. The price is attractive and the archive, at around 40Kb zipped, including the full source code, will hardly even dent the phone bill.

Note: This article is ©Jonathan Hudson and may be freely copied and reproduced.

■

Glossary of Abbreviations and Terms: A ... I

Dilwyn Jones

From time to time, those of us who write for QL Today have to use abbreviations. If we explained every single one in every single article, this would make the articles very long indeed. We know that there are plenty of less experienced or less knowledgeable users out there, so here is a reference guide to those commonly used abbreviations and terms we run into in these pages from time to time. We have put part one deliberately onto a double-sided page, so that you can carefully extract the page (and the page from the next issue) to have your glossary handy all the time.

A/D or A to D - Analogue to digital conversion. The opposite is D/A or D to A, Digital to analogue conversion.

AH, JM, JS, MG - abbreviated names given to the various versions of the QL ROM issued by Sinclair. The letters actually refer to the version of SuperBASIC built in. For Minerva, the equivalent is 'JSL' while SMSQ's SBASIC uses 'HBA'

AI files - Adobe Illustrator files, as used by Line Design. This abbreviation can also stand for Artificial Intelligence.

ANSI - American National Standards Institute.

API - Applications Programming Interface. A set of routines or utilities provided so that programmers can write their own applications to use that code.

ARC - A file compression utility.

ALTKEY - A facility provided by Toolkit 2 (see below) to attach a string of characters to a key. So when you hold down ALT and tap the specified key, that key gives the text for you, to save some typing. For example, if you define ALTKEY 'p','print' and later use ALT p, it types in the word print for you.

ASCII - American Standard Code for Information Interchange. A system whereby standard numbers are used to represent text characters. For example, A is 65.

ASIC - Application Specific Integrated Circuit.

BASIC - Beginners All Purpose Symbolic Instruction Code. Gulp! That mouthful basically (pun not intended) describes the main language understood by the QL. The QL version

of BASIC is called SuperBASIC, or if you are using SMSQ, it's called SBASIC.

BBS - Bulletin Board System. A computer you can dial up with a modem on your computer. Many have programs you can download, masses of information, or even message systems where you can leave messages on the system for someone else who also connects regularly to the system.

BIT - a single digit of a computer memory. 8 bits make up a byte. 4 bits are sometimes referred to as a 'nybble' of memory. BIT is an acronym for Binary digIT.

BOOT - A special program or piece of code which defines how a program or computer starts up. To BOOT UP is essentially the same as saying To START UP, except with BOOT there is usually a special significance in that it is usually the name of a special program which starts automatically as the computer starts. On the QL, this is usually a SuperBASIC program.

BPS - Bits Per Second, a measure of communication speed on a serial interface, for example when using modems.

BSI - British Standards Institution.

BTW - By The Way, an abbreviation used by bulletin board and email enthusiasts, one of a number of commonly used abbreviations for such phrases.

BYTE - a unit of computer memory. Think of it as one of a large number of slots in which the QL can store small numbers. If you know about binary numbers, a byte can store 8 bit numbers, from 0 to binary 11111111, or decimal 0 to 255. Programs are made up of sequences or patterns of these numbers, and larger numbers are made up of a few of these smaller numbers strung together.

CAD - Computer Aided Design.

CD-ROM - Compact Disk Read Only Memory.

CON - Console window. A type of screen window on the QL which you can print information to, and get keyboard information from. If you have opened a CON type window, you can not only use PRINT to write information to the screen, you can also use INPUT to allow the user to type in information in that part of the screen. When the QL is started up, SuperBASIC starts with three CON channels open on the display, which you know as #0, #1 and #2.

CPU - Central Processing Unit, the micro-processor at the heart of a computer.

CRC - Cyclic Redundancy Test, used in error checking.

CTRL-C. This is a special keypress on the QL keyboard, intended to let you switch between programs which are in memory at the same time. Hold down the CTRL key, and tap the 'c' key. This process of switching between programs is called Task Switching.

CTS - Clear To Send, an RS232C signal pin.

DB - Data Base, also the term used for the USA equivalent of Archive.

DBF - Database file.

DD - Double Density, normally refers to a type of floppy disk or drive.

DIN - Deutsche Industrie-Norm. German equivalent of BSI and ANSI.

DS - Double Sided, normally refers to a type of floppy disk or drive.

DTE - Data Terminal Equipment. RS232C communications term.

DLL - Dynamic Link Library, an interface allowing a programmer to use code from within his/her own application.

DOS - Disk Operating System.

DPI - dots per inch, used to describe print density on a printer, for example.

DRAM - Dynamic Random Access memory. The information stored in DRAM is lost if the power is turned off.

DTP - Desk Top Publishing

ED - Extra Density or Extra-high Density. Refers to the 3.2 megabyte floppy disks for the QL, or their disk drives.

EE - Extended Environment, a term used to describe the combination of PTR_GEN, WMAN and HOT_REXT which give you a system which enhances your QL by saving and restoring window contents, hotkeys, standard menus and so on.

EGA - Enhanced Graphics Adaptor for the PC. Now largely superceded, this term is still used to refer to a particular type of screen display. On the QXL, for example, an EGA display mode refers to a 640x350 pixel display.

E-MAIL - Electronic Mail. Commonly used by Internet enthusiasts to send messages etc to each other via the Internet.

EPROM - Erasable, Programmable, Read Only Memory. A special memory chip, which can be programmed with certain information (e.g. some extensions for the SuperBASIC language). Once programmed, you can only read

information from it. If you expose a little window on it to strong ultra violet light (in a sealed container of course, you can buy special ones for this job) it will erase the program and you can then use a programmer device to save new information to it.

FDD - Floppy Disk Drive.

FTP - File Transfer Protocol, a term for a method to transfer files via the World Wide Web.

GAL - Gate Array Logic, a type of logic chip used in the Qubide, for example.

GB - Gigabyte, for 1,024 Megabytes, used to indicate the capacities of modern very large hard disk drives.

GC - Gold Card.

GIF - Graphics Interchange Format, a graphics file format from CompuServe.

GLUE - A type of logic chip, as used on the QXL for example. Usually the chip which controls the interaction of other peripheral chips.

HD - (i) Hard Disk or (ii) High Density, a type of floppy disk or its disk drive.

HDD - Hard Disk Drive.

HERMES - Not an abbreviation, this is the name for a replacement for the 8049 second processor in an original QL. It is sold by TF Services, and is designed to improve the handling of the keyboard, serial ports and so on.

HOT_REXT - Part of the Pointer Environment (or Extended Environment). This file controls the Hotkeys (see below), and provides a number of new words for the BASIC language, allowing control of hotkeys to start programs, or perform specific actions independent of the program you are using at the time. For example, you can define a hotkey which when pressed would start a copy of Quill whatever you were doing at the time.

HOTKEY - See HOT_REXT above.

HTML - Hyper Text Markup Language (or Hyper Text Meta Language in the USA). A name for a language used to create pages for the World Wide Web.

I/O - Input/Output, or getting information in and out of a computer.

IDE - Intelligent Drive Electronics or Integrated Drive Electronics. A method of connecting drives to computers, where the main interface electronics are part of the drive rather than the computer circuit board.

I2C - The bus system used by Minerva Mk 2 from TF Services.

Gee, Graphics! (on the QL)?

H.L. Schaaf

At Bedford, Pa. during the May 1997 QL show USA, Bill Cable used a QXL to run a graphics program of mine that displayed an Escher knot in motion. Based on that I was asked to write "something" for QL Today about QL graphics. As I start to write, I realize how little I know about graphics, and how much more I need to learn about the QL, so this series(?) of articles in QL Today will be a 'learning experience' for me where I hope to share my experiences in graphics programming for the QL and invite you to do the same.

According to my Webster's 7th New Collegiate Dictionary, the term "graphics" is defined as "the art or science of drawing a representation of an object upon a two-dimensional surface according to mathematical rules of projection." For me it is both art AND science as well as recreation, frustration and triumph. The QL screen is only 2-dimensional, but we humans have developed an ability to perceive 3-dimensional objects on a 2-dimensional display, and we can even enjoy the 4th dimension of time as in motion-pictures.

The Escher-in-motion program seen at Bedford, and several others along the same line can be downloaded from QBOX. QBOX also has files of some of my RDS (Random Dot Stereograms). See the QBOX ad in QL Today.

There first was a book titled "Graphics Gems" by Andrew Glassner and now there are a series of them: II, III, IV, V and for all I know VI and more. The first book was a collection of algorithms, source code, etc. by the gurus of the computer graphics world in which they shared some of

their best crafted, most efficient, bullet-proof, polished and perfected algorithms, code, and methods of dealing with the challenges faced by graphics programmers. Each of them was considered a 'Gem' to be admired by the peer group.

I will share my primitive PROCedures and fundamental FuNctions with you, but they are more like grit, gravel and/or goo than gems. I use capricious and arbitrary nomenclature, and adhere to no recognized graphics "standards". I borrow freely from any variety of sources (see bibliography) in my attempts to "bend the QL to my will". I too, too often forget what I was doing, and wish I'd used better REMarks more frequently.

My first computer was a ZX-81 that I built from the kit; what a joy that was! I have dabbled in programming with BASIC, FORTH, Pascal, Fortran, C, and of course SuperBASIC and SBASIC. I've taken courses at the University of Delaware in the biology of vision, the use of computers for image processing, the psychology of vision, and the aesthetics of art. I teach courses on the same topics and computer graphics at the Academy of Lifelong Learning. My academic training was as a Mining Engineer (VPI, class of 1953).

Making a RDS of the Escher knot became an ambition in 1991, and after doing that I went on to making animated RDS sequences, putting the knot into motion. Next was the modeling of other "simpler" Escher items, such as the spiral and sphere, and putting them into motion. Escher's Mobius band is now one of several pending "works-in-progress" (wip). Another wip is based on a folded paper (modular origami) model of Five Intersecting Tetrahedra (FIT). At present it takes about 20 to 30 minutes to create a frame on the QL, so I want to improve my program, and then make "movies" of the FIT in motion.

SGN	Negative, Positive, or Zero?
DMS	Degrees, Minutes, Seconds of arc
HMS	Hours, Minutes, Seconds of time
dist_btwn	for 2 points in 2D
angl_frm	direction from point 1 to point 2 in 2D
space_btwn	distance between 2 points in 3D
cyc	like MOD but with option base 1
Pt_to_Plane	nearest distance from point to plane in 3D
interp	interpolate by given ratio between two values
pip	Point in polygon? Is it or ain't it?
find_z	How far or near?
near_x, near_y, near_z	what is closest pixel, piyel, pizel

SGN and cyc are fairly short so take a look:

Supply your own line numbers !

```

. . . . .
REMark -----
      DEFine FuNction SGN(n)
      RETurn (n>0) - (n<0)
      END DEFine SGN
REMark -----
. . . . .
REMark -----
      DEFine FuNction cyc (Number%,cycle_length%)
      REMark cyclic modular w/option base = 1
      REMark integer number and cycle length
      RETurn ((Number%-1)MOD cycle_length%)+1
      END DEFine cyc
REMark -----
. . . . .

```

And here are some of the PROCedures:

- rotate an array around x, y, or z axis by an angle in degrees
- revolve a sequence of rotations with various axes and angles
- Plane_frm3pts equation of plane from 3 points in 3D
- Newell 'best' equation of a plane from 3 or more points in 3D
- linesN3space 2 lines in 3D, nearest points
- parameterize a line in 3D
- line_n3space a variant to parameterize
- swap exchange two values
- adjust like rotate, but menu driven, user interactive to change scale, flip, and turn
- list_array shows dimensions and contents of an array
- see_inks, show_inks display palette of colors in use

swap is another short one -

```

. . . . .
REMark -----
      DEFine PROCEDURE swap(n1,n2)
      n1 = n1 + n2
      n2 = n1 - n2
      n1 = n1 - n2
      END DEFine swap
REMark -----
. . . . .

```

Bibliography: (these just happen to be some I've acquired over the years)

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Geometry

H.S.M. Coxeter "Regular Polytopes" Dover Publications 1973 ISBN 0-486-61480-8

Hilbert & Cohn-Vossen "Geometry and the Imagination" Chelsea 1990 ISBN 0-8284-1087-9

Escher

M. C. Escher "Escher on Escher" Harry N. Abrams 1989 ISBN 0-8109-2414-5

Bruno Ernst "The Magic Mirror of M. C. Escher" Taschen 1994 ISBN 1-886155-00-3

A nice feature of some of the letters in the Club QL 100 disk in the last issue of QL Today was the description of the equipment used by the author. I'm using a QL with Super Gold Card. The ROM VER\$ is JSU, but most of the time I'm using SMSQ/E, which makes it HBA.

Media storage is via Qubide and a Conner 60 Meg Harddrive, plus 3 floppy drives; a 5-1/4 HD/DD drive, a 3-1/2 ED/HD/DD drive and a 3-1/2 HD/DD drive. The monitor is a RGB with triads of dots. The printer is a Citizens MSP 9 pin dot matrix, similar to the Epson.

I usually LRESPR the SORT code from the QUANTA library before loading any graphics

programs; sorting polygons from far to near is done frequently and SORT sure is quick! I would hope to also try my programs with a Trump card, and perhaps on a Minerva. Hopefully others will not have too much trouble adapting to their systems.

I've written a short program "QL_logo_bas" that lets you see the Simple Stuff like LINE, ARC, CIRCLE, and FILL. I'm Using logo in the sense of the symbol "QL" being a logo; there is of course the programming language LOGO that uses turtle graphics (QL does turtle graphics too!), a good topic for another time. Run the program and then muck about changing values, REMarking out lines, etc. to see what happens.

Another similar short program is QL_logo_R_bas which uses the Relative graphics commands LINE_R and ARC_R

For an outline REMark out line 230 and the lines that have FILL 1.

```
100 REMark QL_logo_bas H.L. Schaaf July 25,1997
110 MODE 4 : WTV : REMark 4 colors and wide window
120 SCALE 100,0,0 : REMark this is the default setting
130 PAPER 4 : REMark green background
140 INK 0 : REMark black ink
150 CLS : REMark clear the screen for a fresh start
160 :
170 set_prompts : REMark to show sequence of 10 steps
180 :
190 prompt 1 : DATA 200,210
200 FILL 1 : REMark turn on the fill for Q oval outside
210 CIRCLE 40,50,40,.8,0
220 prompt 2 : DATA 230,250
230 INK 4 : REMark change to background color (green)
240 FILL 1 : REMark turn on fill for Q oval inside
250 CIRCLE 40,50,30,.8,0
260 prompt 3 : DATA 270,290
270 INK 0 : REMark change back to ink color (black)
280 FILL 1 : REMark turn on fill for Q curlicue
290 ARC 70,7 TO 55,15,-PI/5 TO 35,25,PI/5
300 prompt 4 : DATA 310,310
310 LINE 35,25 TO 45,30
320 prompt 5 : DATA 330,330
330 ARC 45,30 TO 60,25,-PI/4 TO 80,15,PI/4
340 prompt 6 : DATA 350,350
350 LINE 80,15 TO 70,7
360 prompt 7 :DATA 370,380
370 FILL 1 : REMark turn on fill for letter L
380 LINE 90,10 TO 134,10 TO 134,20
390 prompt 8 : DATA 400,400
400 LINE 134,20 TO 98,20
410 prompt 9 : DATA 420,420
420 LINE 98,20 TO 98,90 TO 90,90
430 prompt 10 : DATA 440,450
440 LINE 90,90 TO 90,10
450 FILL 0 : REMark turn off fill (default setting)
```

Next time a little more about the Escher in motion.

Editor's comment: Herb already mentioned it: the wonderful graphics on the cover page were programmed by him. You can see all of them wonderfully animated on your own QL screen, if you like. The programs are available on most BBSs by the time you read this, I hope. I will put them on my BBS so that you can download them if you like.

Are you sitting comfortably? - Part 2

Geoff Wicks

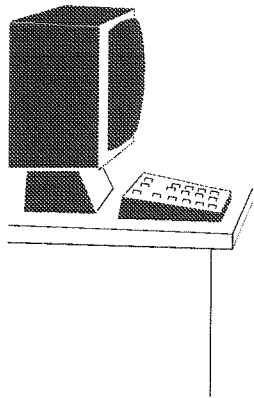
Some years ago I was secretary of a Work's Council when computers were being introduced into head office. The staff who would use these asked us for advice on the relevant regulations and safety guidelines. I ordered a handbook from the trades union, but never received it. Months later I learnt the director had confiscated it or, to use his euphemism, "had put in it the library".

It is a sad story, because at the time head office was being extensively rebuilt. Both the building and furnishing were to be adapted for computer use. If the director had not had such a childish panic, he would have had praise from his Work's Council over the introduction of computers.

Most of us cannot afford the luxury of a purpose built room for our QL. We may not even have a study or den for our computer, but have to use it in a room whose primary purpose is eating, living or sleeping. Nevertheless we should try to follow the industrial guidelines for computer use. This article is based on advice given by Dutch Trades Unions.

LIGHTS AND SCREENS

Finding the ideal place for your work area can be difficult. Your monitor should be placed so



there is no reflection on the screen from either internal or external light sources. Easier said than done. The ergonomic advice is that the screen should be tilted slightly upwards, but usually the room light is on the ceiling. At the same time you need enough light to be able to read clearly from your document holder. These are often conflicting demands.

In general fluorescent lighting gives fewer reflection problems than light bulbs. You could also use rail fittings with spots pointed away from the computer screen. A good monitor usually suffers less from reflection problems than a cheap one, because it will have an anti-reflection layer. Another suggestion is the use in programs of black letters on a white background, or in QL terms PAPER 7, INK 0.

The monitor should never be placed directly opposite a window. If the screen faces the window, you will get reflections. If the back of the monitor faces the window, you will be looking at both the screen and the window, and the contrast differences will

prove tiring.

A screen is best placed so that outside light comes from the side. Even here the contrast between the outside light and the screen can be annoying. As the intensity of the outside light can vary according to weather conditions, time of day and seasons, some form of screening is necessary. Curtains can

be used, but venetian blinds and especially their vertical equivalent are better.

THE WORKING AREA

Now it is time to start using our tape measure. The measurements I am giving are suitable for about 95% of all known people, or so my trade union book says.

WORK TABLE: One measurement is constant. The height of your work table or desk should be 72 cm. There is a good practical reason for this. In a workplace several people may use the same computer. Although there are work tables whose height can be varied, these are not easily adjusted, especially if there is computer apparatus on top. An office chair can, however, be easily adjusted to suit different users. In your

home, if you are very tall, you could adjust the height of your work table.

The thickness of your table or desk top should be 2 cm. This is thick enough to be firm, but thin enough to ensure you can easily get your legs underneath. The table top should be at least 90 cm deep. Anything smaller and your keyboard and monitor will not fit.

CHAIR: Your chair is perhaps the most important part of your working area. It is the piece of furniture you will have to adjust to bring you to the correct height for working comfort. It is worthwhile investing in a good, adjustable office chair. This should have a seat which is adjustable between 40 cm and 60 cm from the ground, and a back support adjustable between 60 cm and 80 cm from the ground. The back support should be so adjusted so that it supports the base of the spine.

The height, to which the chair should be adjusted, is complicated. Ideally it should be adjusted to a different height for typing work from that for reading and writing. If you are typing, your elbows should be 2cm above the work surface when your upper and lower arms are bent 90° at the elbow. If however your keyboard is thicker than 2cm then you should adjust the height accordingly. The correct typing position is one in which your hands are not bent at the wrists. If your computer work is largely reading from the screen and making notes, your elbows should be 2 cm below the work surface.

You should be sitting so that the angle between your lower and upper legs is 90°. There should be at least 20 cm between the seat of the chair and the table top, and you should be able to sit with your feet on the floor.

As you can see, there are some contradictions in these figures, especially for tall and short people. If you are so tall that, when the chair is adjusted for your height, there is less than 20 cm between the seat of the chair and the working area, you will have to have a work table higher than 72 cm. If you are short you should use a footrest. It is not sufficient to use the simple footrest provided on many desks. It must be a solid footrest of minimal 20 cm x 30 cm and preferably 40 cm x 50 cm. For most people a footrest 14 cm high will be adequate, but some will need 19 cm. If it is a footrest with an incline this should be not greater than 15°.

SCREEN: The placing of the screen is also quite complicated. The centre of the screen should be between 50 cm and 70 cm from the eyes, and should be below the level of the eyes. It should be positioned so that you look down

on the screen at an angle of about 20° from the horizontal. In practice this can be translated into distances using the following table:

Distance	Height below the eyes
50 cm	13.5 cm - 18 cm
60 cm	16 cm - 22 cm
70 cm	19 cm - 25 cm

DOCUMENT HOLDER: If you use a document holder this should be at the same distance from your eyes as the screen. There are differing ideas over the ideal placing of the document holder. Some users say it should be placed at the side of the screen and others under the screen. In the latter case the document should not be larger than A5 size.

I am sorry if I have disappointed some readers by writing a general article that has not been specific for the QL. Next time I shall write about screens and software and this will be QL specific. QL users are now using screens with resolutions that vary from 512 x 256 to 1024 x 768. This, coupled with the native multitasking of the QL, gives both users and software authors a few extra problems.

A message for Dutch speakers:

Mijn hoofd informatiebron voor deze artikelen is Eltjo Buringh: "Handboek beter werken met beeldschermen". Uitgever FNV. Mijn editie is vrij oud en ik weet niet hoeveel het handboek nu kost. Wel is er een reductie voor leden van vakbonden aangesloten bij de FNV.

■

My QL System

Davide Santachiara

My name is Davide Santachiara and this is my first article for QL Today. Some of you have already met me at some QL international or Italian show, or at least virtually on Fidonet / Internet newsgroups. For the others I will write a brief introduction to myself.

INTRODUCTION

I live in Italy and I am 27 years old. I have been using the QL since 1986. It was my first real computer (not a bad start, isn't it?) after an HP 41C programmable calculator. I remember with a bit of nostalgia when in the Summer of 1986 I began studying the QDOS operating system and the Motorola 68000 assembly code by reading Adrian Dickens' Advanced User Guide.

After some years I met another Italian QL user, Marco Ternelli, who was studying Computer science at the "University Normale di Pisa" - this is the most advanced university in Italy. In fact Marco proved to be a real genius as well as a nice fellow.

Marco was writing some software for the QL, so, more or less in 1990, we joined together founding a QL software house: Ergon Development. Between 1990 and 1995 we produced a good number of interesting pieces of software. In particular I remember the various Spectrum emulators, just to name two: ZM/hT (a Z80 to 68000 code translator, "an incredible feat of computer science" according to Simon Goodwin's review on QL World) or ZeXcel (the only QDOS/SMS Spectrum emulator which fully exploits the extended environment). Other good hits for us were DEA, the intelligent 68000 disassembler, and MasterBasic (still one of the few QL SuperBasic development aids).

When we were studying we had quite a lot of time to dedicate on our beloved QL, but when we started working things changed dramatically. We have now very little spare time though I still support our programs. My last two years were mainly dedicated to setting-up a QDOS based BBS: Ergon BBS. I initially used QBOX written by Jan Bredenbeek and I then converted to the very powerful and well supported PBOX written by Phil Borman. Ergon BBS is a QDOS/SMS dedicated BBS where you can find the best QL shareware and public domain software available. It is fully bi-lingual, Italian and English, both in menus and file description so a try could be worthwhile. Just call +39 522 300509 from 21:00 to 4:30. I have also an internet web page where you can download some PD programs: just point your browser to

<http://www.geocities.com/siliconvalley/park/6533>.

MY SYSTEM'S HISTORY

Gold Card

Like many of you I started with a 128Kb unexpanded QL. Then I added a 640 Kb expansion and a floppy disk interface. In 1991 at the Turin Italian meeting were sold the first batches of Gold Cards and this was the first real QL revolution. I couldn't resist it, and I immediately fitted the Gold Card and the 3.2 Mb drive (wow) at the show. It was all running so fast that I couldn't believe it. Amazingly compatibility was almost 99.9% maintained.

Super Gold Card

I liked the original QL but in the following months I also bought a SPEM System 2 cabinet and a SPEM Futura keyboard. At last my continuous need for keyboard membranes ended. Two years later I bought the very first working SuperGoldCard at an international QL meeting in Bielefeld, Germany. I assure you it was not very easy to convince Stuart to sell me the SGC he has brought with him for demonstration. But this was the second real QL revolution. The speed-up over the Gold Card was amazing once more compatibility was maintained at 100%. If I remember well at the Bielefeld meeting Stuart was already selling the QXL card, but I didn't own a PC at the time, furthermore the operating system (SMSQ) had still some problems.

QXL

In 1995 I bought a Pentium 90 PC, it was absolutely needed to write my University thesis and it is now mandatory for my work. Meanwhile I bought the QXL card without processor. In fact I already owned a full blown 68040/33 with FPU and MMU which was immediately mounted together with a 66 MHz oscillator. I must admit I never used "seriously" the QXL card because of its not so good i/o speed. You can overcome the low floppy disk read/write speed with some DOS software like HyperDisk. Still the serial, parallel and hard disk i/o speed are not up to my needs. Though I sometimes heard promises of fastest serial port on the QXL nothing has been really done and this is really a pity because the QXL is still the fastest QL system available, and the speed does not depend on the hosting PC.

QPC

In 1996 came QPC. I really could not believe somebody had time to write a software emulator for PCs. Obviously I bought it, but like the QXL, I am not using it too much. QPC has a lot of advantages over the QXL card. Apart from the fact that it does not require any piece of hardware, the i/o of both floppy disk, hard disk, serial and parallel port are at very high standards. Mouse response is also very good. QPC supports music CD playback and much more interesting features are coming like direct DOS file access and soundcard support.

There are only two drawbacks: on my Pentium 90. It is slightly faster than a Gold Card QL and secondly you cannot run it in a Windows 95 DOS window. Sometimes I need to start

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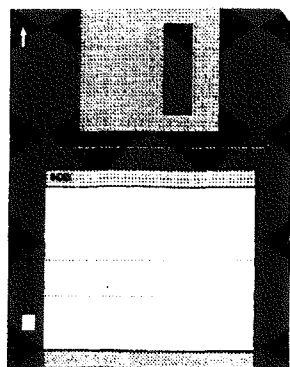
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SMSQ/E while using some PC programs so I cannot shutdown the PC programs to run QPC. This is why the QXL comes in useful. It can be started in a Windows 95 DOS window though the i/o (especially the mouse response and the screen redraw) is even worse than running it in a real DOS session. I am really looking forward to a native Windows 95 QPC version.

AURORA

Now a small step back to introduce how I got Aurora. When, in Christmas 1994, I started running my Fidonet BBS (Ergon BBS) I was using my original QL, Super Gold Card, Hermes and Qubide IDE interface - the latter was another piece of hardware that changed dramatically my way of using the QL. After some months I bought superHermes and I was finally able to exploit 100% my v34 modem. All the above items were mounted in my SPEM System II chassis but I never liked this assembly too much. I had one power supply for the QL motherboard, one for the floppy disk and one (home made) for hard disks. So I always intended, as soon as the long awaited QL graphic card was ready, to buy one and assemble all the bits in a PC cabinet with a single PC power supply. Some months ago I took the final step: I bought Aurora and QPlane. As it often occurs in these cases, all didn't work first time but it was not too difficult to understand and correct the problems. In conclusion, after some days of tests, I had my Aurora system running in a PC cabinet. Actually all my work was to read the manual, configure the various jumpers, connect cables and adapt my boot file. Next step was to firmly fix all the boards in the PC cabinet. Funnily this was the thing that took me the longest time.

BRAQUET

When I saw the advert for QBranch's "Braquet" in QL Today I thought it was the piece of "hardware" I needed and I immediately ordered one. The first line of the manual says: "The Braquet has been designed to make it easy to put your Aurora into a PC style case". And in fact mounting was really simple, instructions were clear and it allowed me to have a rock solid Aurora-Qplane-SGC-Qubide assembly in my PC case. The Braquet consists of two plastic panels where you mount Aurora and QPlane. Nuts, washers and screws are provided. The biggest panel is then fixed on the cabinet PC panel. It's just a question of aligning the holes and finding the right screws, no more 1 hour enjoyable DIY work! For 16 pounds I think it is a bargain, it

saved me a lot of work to assembly my Aurora system in the PC case. In conclusion a very useful idea.

GREETINGS

I'd really like to mention how good and stable my system is now, with the following components which I strongly recommend to everyone who still enjoys the original (?) QL idea and not an emulator:

Aurora graphic card by Qubbesoft / Nasta design QPlane backplane by Qubbesoft / Nasta design Qubide IDE interface by Qubbesoft / Nasta design Super Gold Card by Miracle Systems superHermes fast serial port, mouse port, keyboard interface by TF Services, all mounted in a PC case with The Braquet.

This system runs almost 24h/24h - during the night it runs Phil Borman's PBOX (Ergon BBS) and during the day the very good QVM from Jonathan Hudson (automatic answering phone, fax and data detection). I must confess my admiration for Zeljko Nastasic's work on Qubide-Qplane-Aurora. When you are doing a complex project if you have a good knowledge you should be able to find a solution. But most of the time the problem is to have a neat top-down approach in order to have a feasible cost effective solution. And even if you meet this second requirement you should allow interoperability with future (and old) products. Finally if you are really brave you should be able to prevent the unforeseeable. I think Zeljko was able to meet all these requirements

DREAMS?

Here is a list of things I'd like to see in the future.

1) A faster SGC replacement. It seems the Coldfire project is very near to becoming reality and I will surely buy one

2) An I/O card for the QL. Actually we miss a fast bidirectional parallel port and a fast serial port. SuperHermes serial 3 works fine at 38400 but now that we have 64kbit ISDN lines or 56kbit protocols we definitely need something more powerful. An Ethernet card could be another interesting addition.

3) A Windows 95 version of QPC.

4) TCP/IP

5) New screen driver with more colours and background redrawing.

Am I asking too much?

Davide Santachiara,

Fidonet 2:332/534,

Email: ergon@ittc.it

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Byfleet Show Review

- a view from a visitor

James Hunkins

Being from the United States, it is a rare event that I can actually attend a QL show. It is even more rare that I can get to a show on European soil (this is actually my first time). So, very dazed and tired from the long trip over, I walked into the Byfleet community hall and watched as QL traders put together their goods and QL users started showing up. Before going further, I can guarantee that I will miss-spell or leave out names, and probably even mention the wrong thing for the wrong person. My apologies, but after the trip over here, etc (not to mention my own disorganized thought processes) and with all the activity in the hall, I am just happy that I can get the Byfleet part correct! First, it seems to be in order to mention the traders that I can remember. Those in attendance were Geoff Wicks (Just Words), Roy Wood (QBranch), Jochen Merz (JMS), Bill Richardson (W.N. Richardson & Co), Tony Firshman (TF Services), and Stuart Honeyball (Miracle Systems). There were most likely others but my brain refuses to respond beyond this. Simply put, there were enough traders with their hardware and software to keep everyone busy. Four talks were given throughout the day. Geoff Wicks discussed and showed his newest update to his Thesaurus program which now fully uses the pointer environment. He has done other things to improve it such as rewriting the data base (making it more compact but with no decrease of information). The program also now supports the different screen resolutions available. At first glance, the program seemed to have a well thought out user interface, intelligently using the mouse and windowing systems of the pointer system (more details in the next issue of QL Today, thanks to my being grabbed by Dilwyn Jones to do a review on the program). The new pointer version of the Thesaurus is available now. However, as is always the case, when loading it onto my laptop for review, we discovered an incompatibility in the program when running it under SMSQ/E. Geoff headed off to find and repair the problem. It will probably have been fixed before you read this. The second talk was by Tony Firshman (TF Services) and Stuart Honeyball (Miracle Systems) about the new ROM Disk soon to be available for the QL. The

ROM Disk is a tiny card that inserts into the QL's ROM port or through an adapter onto the Aurora and requires no mods to the original machine. It uses flash memory (2 or 8 MBytes versions) and will keep anything written to it even when powered off. Writes will be slow but reads will be faster than a hard disk. I will be using mine to quickly boot up my Aurora/Super Gold Card system with SMSQ/E, etc. I plan to put all the files that my boot program loads onto the ROM disk. It is also possible that some users will use the ROM disk for avoiding the need for disk drives entirely when carrying around their QL systems for demonstrations, etc. Another use might be to carry their QL ROM drive from their QL system to another QL system elsewhere, providing a known working system. A working prototype was shown, with a short timetable for the production versions to be completed. The final shipping will, as usual, depend on when the drivers are finished. The third and fourth talks, I am sorry to say, were missed by me. By that time my exhaustion was starting to overwhelm me and sitting still would probably have resulted in an embarrassing episode of snoring (irregardless of how interesting the talks were). I do remember that the third talk was about an upcoming update to a QL Hard Disk backup program that promised a major speed up! Unfortunately, it sounds like compression will still not be part of it, but it was suggested during a later conversation that perhaps the program could link into ACP (Archivers Control Panel) to handle the compression (it was great how ideas were bantered about by so many different people throughout the day). In addition to all of the normal goods at each of the vendor's tables, a few additional new items come to mind. Bill Richardson, in addition to his large array of hardware and Z88 goods, was discussing a new memory card for the Z88 similar to the ROM Disc for the QL. It will be a 1MByte card using flash technology. Like the original EPROM cards for the Z88, it will not lose memory when the system is powered down. The improvement comes from two areas. First, it will be rewritable within the system (the EPROMs required external erasing by UV light). Secondly, the cost will be substantially less than the EPROM cards were. I got a chance to see the major rewrite of Page Designer 3, using the full screen of a SMSQ/E system (the extra resolution makes quite a difference). I myself picked up The Braquet from QBranch to make

the mounting of my QL and Aurora card into a tower case much easier (now I should actually finish that project, I hope!). Of course this project being finished will be necessary in order to use my SuperHermes to control the Lego robot that I have to purchase and build (this new project comes compliments of watching TF Services LEGO robot in action all day). As goes with any show of this type, I had the opportunity to meet in person several new people. I ran into Dilwyn Jones (who convinced me to do another review for QL Today), Quanta Treasurer John Taylor (QUANTA also had a table), and many others. Sol, for example, showed me a large collection of color prints which were generated using some of Herb Schaaf's 3D graphics software. As usual, I missed some people who were there. For example, Dave Walker was literally standing next to me and I never even said hello to him. I don't believe that I ever saw his picture and I was probably paying attention to someone else's conversation at the time. Maybe next time... After the meeting finally ended and the crowd departed and the tables were cleaned up, some of us headed for a local pub for a few social drinks. More talk about the QL community, the successful show, and future plans (not to mention a few good jokes) took place. A pleasant way to wrap up a very active and interesting day. Of course, this report is not complete without a comparison to a typical US QL show (I have been to the last three). I would say that the differences between the shows were duration and logistics based. As the United States show only occurs once a year and we are thinly spread out, we all tend to cram even more into the event. The event in the US usually starts on a Friday night with dinner and drinks. The show occurs on Saturday with (as of last year) a lunch break for everyone, and then a banquet on Saturday night. On Sunday for those who can stay, sightseeing and meals together continue. We also seem to have more spouses in attendance (probably to share stories of their neglect or better yet, their participation). In contrast, the Byfleet show was a single day event which ran non-stop (lunch was supplied on sight as ham or cheese sandwiches, cake, and coffee/tea). The pub meeting afterwards was not a formal event nor heavily attended. The similarities are more intriguing. To put it simply, the people are the same. This is a passion that we all share. While the attendees come in all sizes, types, and backgrounds, we are all a bit

fanatical about our QL systems. QLers seem to be helpful, enthusiastic, dedicated, a bit realistic when forced to be, and usually optimistic. I suspect that if you made a European show into a two to three day holiday type event as we do in the US, it would be almost impossible to tell the difference.

A little side report goes here. This is my first trip to Europe and it has been made very pleasant due to the hospitality and planning of my host, Jochen Merz. This all came about due to the QL international community. I have met many people though the QL scene over the years, mostly through writing for this magazine and others, ordering products, and through email. I met Jochen when he and others came to the States for one of our shows and have become good friends with him and others since then. This would never have happened and I would most likely not have visited Europe for many years to come, if it were not for this QL community connection. I am grateful for the friends it has supplied me! Another side note about my visit may be of interest. You might say that I participated in a mini-international QL meeting in Geneva, Switzerland a few days ago. It consisted of Jochen (Germany), myself (US), and Ian Pizer and his wife (Switzerland). What is most interesting is that you would have not known which country you were in if you listened into our conversations. As I finish writing this in my motel room in Zermat, Switzerland (at the base of the Matterhorn, recovering from a day of skiing), I am now thinking about my return to the US. And about the planning of the next US QL show. Let me take this chance to invite everyone next spring for a QL meeting in the States (nice excuse for a vacation). Hopefully I will see all of my old and new European friends. Until next time!

■

The first ever Irish QL Show

Darren D. Branagh

On Saturday, August 30th, the first ever Irish QL show was held at the Laragh Community Hall near Glendalough, Co. Wicklow. I organized the event, and have been saddled with writing the review, so forgive me if it's a little biased!

All of the Traders arrived on Friday and checked in with me that evening, as they were all staying in my Guesthouse. Ian Pizer and his lovely wife (a really wonderful lady) arrived first, with Tony Firshman, Jeremy Reeves, and Stuart Honeyball arriving via their handy fold-up bikes in the early evening. John Taylor and his wife also called to say hello, as they were staying in a local B&B. We hit the local restaurant like a ton of bricks on Friday night, meeting up with the "Air Fox" gang - Bill, Roy, Steve, and Peter - who had arrived late and decided to head straight to the restaurant. I was glad to hear Stuart say it was the best restaurant he'd ever been to on a QL show weekend, (he should know!!) so at least the weekend got off to a good start.

We arrived at the Hall around 9.30am to set up the gear. I was glad to see Roy Wood had brought an Aurora, as Ron Dunnett couldn't make it over, so I got to see this amazing product in the flesh for the first time. High Resolution is really a boon on a QL system, so I bought a QXL II from Roy and am very pleased with it.

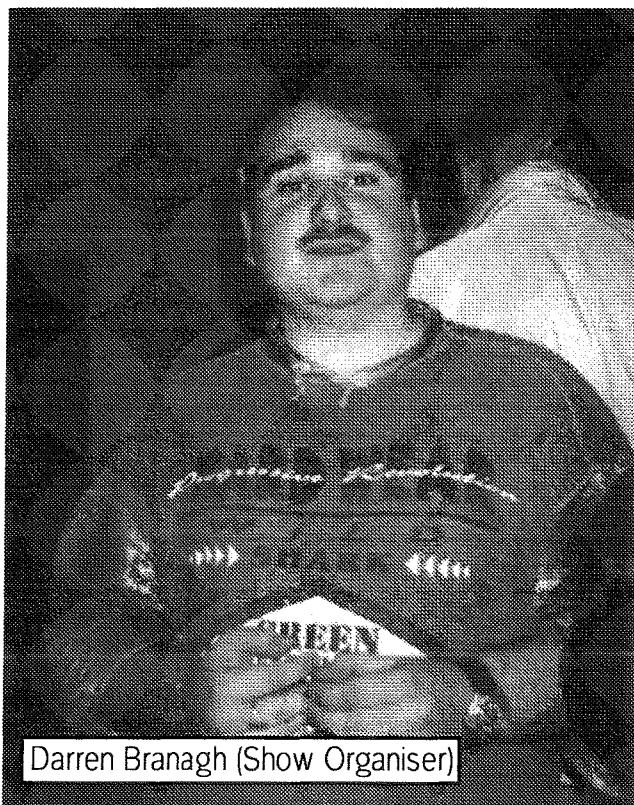
Roy also demonstrated ProWesS to me, and in a few minutes I was hooked - another hole in the wallet! But, as the latest version is now an essential purchase if you wish to use the new versions of LineDesign and DataDesign among other PROGS software, I didn't mind to much - also means when I buy either I get them for the new low price of just £24.00 each....

Hilary O'Kelly (A QL neighbour of mine) decided to opt for the new SuperHermes LITE from Tony Firshman. Tony has just recently released the LITE, which basically fills a gap in specification between Hermes and SuperHermes, for a price

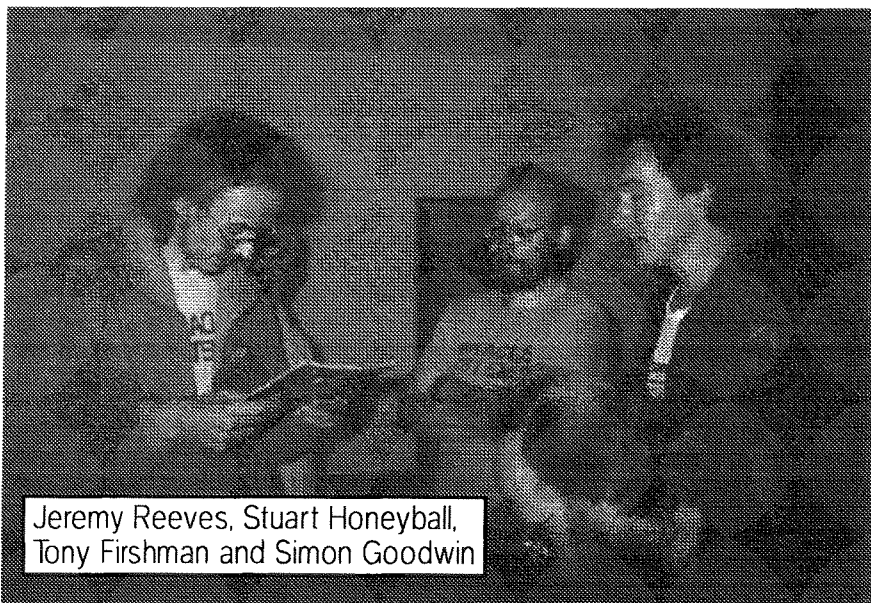
fixed neatly between the two. What you get is an excellent IBM keyboard interface, with all the features of the original Hermes chip too, such as improved serial port handling, so you can finally ditch the QL's dreadful 8049. Hilary is delighted with it, especially the new keyboard. Tony was also selling wonderful ergonomically shaped mice, which work well with the QXL, QPC, or the QL and SERMouse software, or SuperHermes. I purchased one, and they fit the hand beautifully. They also have a switch on the base to change between 2 and 3 button mode, a very useful feature.

Also at the show was Bill Richardson of EEC, selling his range of Z88 products and disk drives etc. Hilary also

opted for a Z88, complete with carry case, for a very good price as Bill now has only reconditioned Z88 stock left - for just £50 each! I also took advantage of Bill's presence to stock up on Rampacks and EPROM's, and an EPROM Eraser for my Z88. I also discussed with Bill the possibility of starting a Z88 newsletter or magazine - anyone who may be interested, please contact me for details, or mention it to Bill.



Darren Branagh (Show Organiser)



Jeremy Reeves, Stuart Honeyball,
Tony Firshman and Simon Goodwin

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QXL II	£ 200.00
Super Gold Card	£ 160.00
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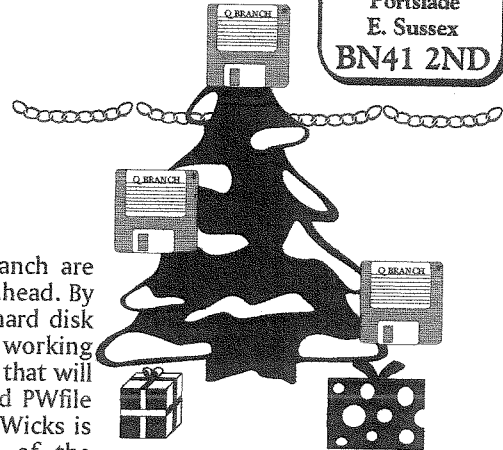
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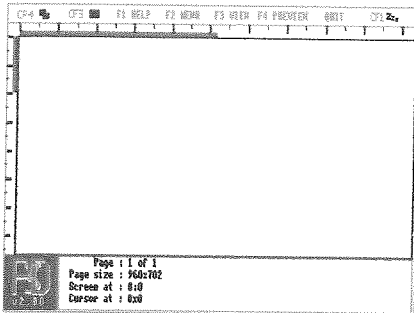
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Two new programs have been released this past month and Q Branch are forging ahead with the release of more new products in the months ahead. By the time that you read this we may be selling 'Knight Safe', a new hard disk backup utility that has many innovative features. We also have writers working on colour picture drivers for Text 87 and a musical notation program that will enable you to write and print sheet music. PROGS have just released PWfile which is a file handling program running under ProWesS and Geoff Wicks is putting the finishing touches to a new pointer driver version of the Thesaurus.

New Version! Page Designer 3/S

by Barry Ansell



Page Designer 3/S £ 40.00

Upgrades from previous version £ 15.00

Previous (512 x 256) version now £ 35.00

Package deals

QXL II + SMSQ/E	£ 260.00
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On the hardware front we should be able to supply the new 'ROM-Disq' from T.F. Services which allows users to store up to 8Meg of data or programs in the ROM port of a QL or Aurora. T.F. Services, Miracle Systems, and Q Branch will be joining forces to produce the 'Ultra Gold Card' which will be a 68060 driven replacement for the Super Gold Card. Although this was originally intended to work alongside a SGC people have expressed a wish for a complete replacement so the plans have changed.

Q Branch would like to wish all of our customers a Merry Christmas and a Happy New Year. We hope to hear from you all again soon.



We can accept payment by VISA, Mastercard and Switch. You can also pay by Eurocheques made out in Sterling or a Sterling cheque drawn on a UK Bank. Prices include Post and Packing in Europe.



Simon N Goodwin came over too, and I was surprised to learn that since his DIY Toolkit collection became CardWare, the only people who have send him a postcard are myself and Dilwyn Jones! So, if you haven't sent him a postcard - do so! YOU KNOW WHO YOU ARE!

Mind you, if you saw Simon at the show, with one bright green luminous sock on, and a bright yellow one on the other foot, you'd be forgiven for not sending him one!

Dilwyn was there with his lovely new colour laptop, running QPC. I was very impressed, and think that this is the next QL orientated acquisition for my collection.

Jeremy and Stuart are collaborating on the Ultra Gold Card, which will be based on a 68060 chip and have advanced sound capabilities, by Jeremy, who as a result has stopped work on his separate sound card idea. Jeremy fell madly in love with Ireland and didn't want to leave, though I think a certain famous Irish Black alcoholic drink had a lot to do with that!

It was also good to meet some other Irish QL'ers, namely Jim Henry from Belfast and also a few others. It was also nice to find another QL user in Wicklow (Hilary and myself where under the impression we where the only ones) as Roy sold a QUBide and a QPlane to a local man, so he will be worth tracking down!

On the Whole, I think everyone enjoyed themselves, particularly the Saturday night when Dilwyn had to resort to using his Laptop QPC to split the Bar Food Bill a dozen ways!! Seriously! Mind you, I think Roy Wood enjoyed

that night most, as the half pint glass of wine I got him helped!

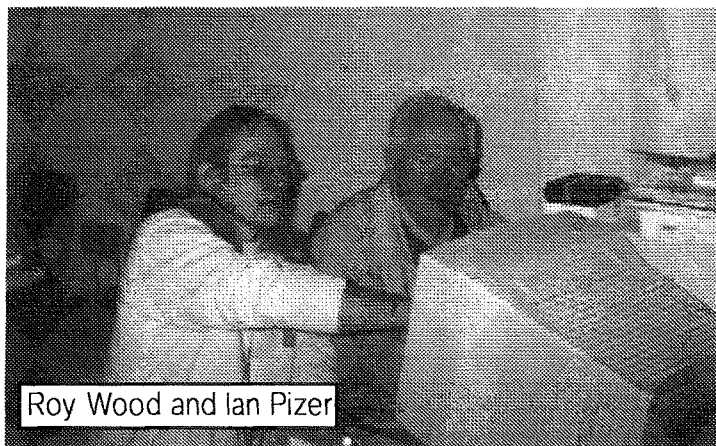
The bike mob returned home on Sunday morning (in the lashing rain, unfortunately) but the Air Fox crew had already left at 8 a.m. to reach the Airport in time. Dilwyn and Simon

"moved in" from their B&B in the village after everyone had left on Sunday, as they had decided o stay until Monday. Therefore, most of Sunday night was spent in front of my QXL and Dilwyn's QPC, with Simon writing little additions to his popular DIY Toolkit, there and

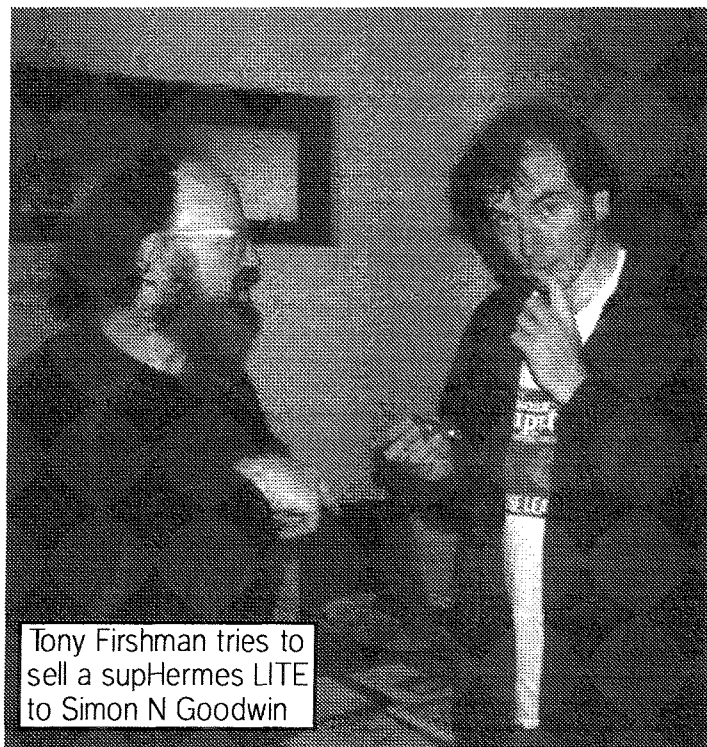
then! Some cans of Beer (!) followed, and we called it a day in the early hours of Monday morning! I think poor Dilwyn needed a week to recover, and even someone on the ferry journey home to Wales tried to rob his QPC Laptop, which turned out to be a mix up in luggage!

So there you are. I must thank every one of the traders for taking the time to come over, especially as the turnout was probably a little less than expected, and especially a thank you to John Taylor for donating the hall rental via QUANTA at the last moment, even though I was willing to pay the costs, which in turn allowed for the free distribution of teas, coffees and snacks throughout the day. I hope everyone enjoyed it (I think they did) and that maybe we'll do it

again next year - It was certainly a good excuse for a few beers if nothing else! I'm looking forward to the next one already!



Roy Wood and Ian Pizer



Tony Firshman tries to sell a supHermes LITE to Simon N Goodwin

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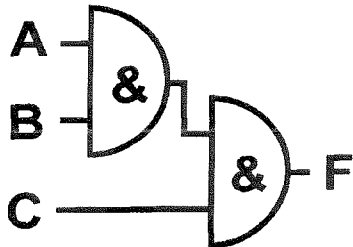
Logical Fundamentals - Part 2

Stuart Honeyball

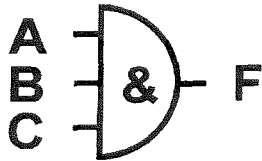
The first part of this series was an introduction to the combinatorial elements INVERTER, AND gates, OR gates. It also touched on the storage entities the RS FLIP-FLOP and the D-TYPE LATCH.

To make logic circuits with the greatest economy it is necessary to know how to convert one combination of gates to another combination having the same effect but possibly simplifying the overall circuit. The process is called minimisation.

An AND gate feeding another AND gate can be replaced by a single AND gate, e.g.



is equivalent to



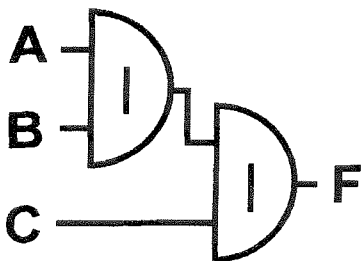
or in Superbasic:

$(A \text{ AND } B) \text{ AND } C$

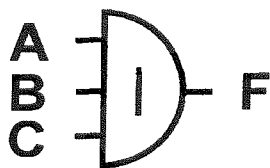
is equivalent to

$A \text{ AND } B \text{ AND } C$.

Similarly for the OR gate:

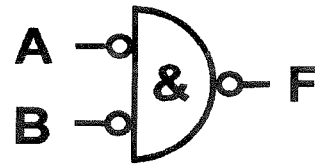


is equivalent to



$(A \text{ OR } B) \text{ OR } C = A \text{ OR } B \text{ OR } C$.

An AND gate can be used as an OR gate by inverting each of its inputs and its output. (The diagram below has circles on its inputs and output indicating they are inverted rather than drawing out inverters in order to save space)

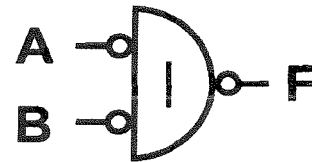


is equivalent to

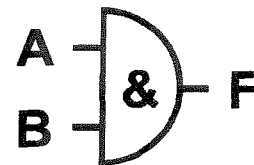


i.e. $\text{NOT}((\text{NOT } A) \text{ AND } (\text{NOT } B)) = A \text{ OR } B$

Likewise an OR gate can be turned into an AND gate by inverting its inputs and output:

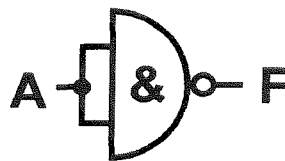


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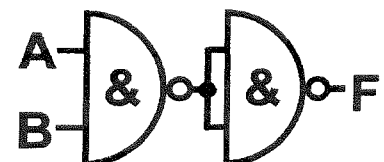
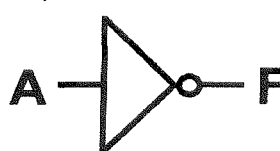


$\text{NOT}((\text{NOT } A) \text{ OR } (\text{NOT } B)) = A \text{ AND } B$

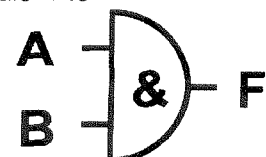
It is interesting to note that if the only logic elements in the stores were 2 input NAND gates then you would still be able to build any logic circuits you liked:

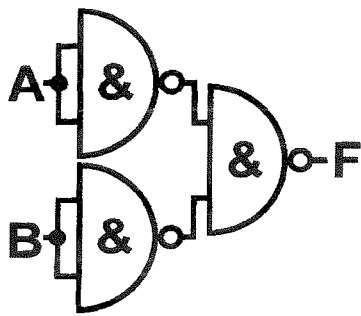


is equivalent to

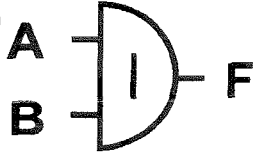


is equivalent to





is equivalent to



The output of an AND gate is often misleadingly referred to as the product of its inputs. This came about because if you use the numbers 0 and 1 to represent the signal levels false and true respectively then the result is correct. For example:

$$A \text{ AND } B \text{ AND } C = A * B * C$$

To verify this the right hand side of the above equation has the value 1 only when all A, B and C have the value 1. If any of them is 0 then the product is 0 too - just like an AND gate.

It is also common practice to refer more confusingly to the OR function as a sum, e.g.

$$A \text{ OR } B \text{ OR } C \text{ is often written as } A + B + C$$

With the QL's convention of using 0 and 1 for boolean values this would appear to work only when all 3 inputs are false or when just 1 is true. The QL does however coerce any value greater than 0 to be true when used in a boolean expression, e.g.

$$A \text{ OR } B \text{ OR } C = \text{NOT} (\text{NOT} (A + B + C))$$

The 2 NOTs invert the sum and then invert it again bringing it back to its original state (2 wrongs make a right) but with a valid boolean value. This shows that the use of the terms "product" and "sum" are sort of right for describing the AND and OR functions.

In boolean logic a sum of products can always be converted to a product of sums. E.g.

$$(A * B) + (C * D)$$

gives the same value for any combination of the four input values as

$$(A + C) * (A + D) * (B + C) * (B + D)$$

To get from the sum of products to the product of sums you 'cross OR' the terms in the products to give the sums and then AND the resulting sums. In this example the 1st term from the 1st product A is ORed with the 1st term of the 2nd product C to give the 1st sum (A+C), then the 1st term of the 1st product A is ORed with the 2nd term of the 2nd product D to give

the 2nd sum (A+D) then the 2nd term of the 1st product B is ORed with the 1st term of the 2nd product C to give the 3rd sum (B+C) and lastly the 2nd term of the 1st product B is ORed with the 2nd term of the 2nd product D giving the sum (B+D). Finally the 4 sums are combined to give the resulting product.

If you don't believe that the above sum of products and the product of sums are equivalent then you could draw out a truth table and see. (Note that because there are 4 variables each of which can have 2 states the truth table will require $2^4 = 16$ lines.)

You've probably guessed that converting a product of sums into a sum of products will have a similar look to it and you'd be right:

$$(A + B) * (C + D)$$

can be also be represented by the sum of products

$$(A * C) + (A * D) + (B * C) + (B * D)$$

It was shown that a sum of products can be turned into a product of sums and that a product of sums can be turned into a sum of products so if the the last sum of products were to be 'cross ORed' it should give the original product of sums. This is tedious and is usually done by computers but would give 16 sums starting with:

$$(A+A+B+B) * (A+A+B+D) * (A+A+C+B) * (A+A+C+D) * \dots$$

This looks nothing like the product of sums it originated from and that is because it needs simplifying. Reference to the truth tables in the previous article makes it clear that

$$A \text{ OR } A = A \quad A \text{ AND } A = A \quad A \text{ OR } B = B \text{ OR } A \quad A \text{ AND } B = B \text{ AND } A$$

Using these rules the above the product of sums simplifies to

$$(A+B) * (A+B+D) * (A+B+C) * (A+C+D) * \dots$$

Again a truth table could be used to verify that

$$A \text{ AND } (A \text{ OR } B) = A \quad A \text{ OR } (A \text{ AND } B) = A$$

Using this the first 3 sums simplify to (A+B) leaving the product of sums so far as

$$(A+B) * (A+C+D) * \dots$$

If you were to work through and simplify the product of all 16 sums then you would end up with the original

$$(A + B) * (C + D)$$

This may all seem dreadfully long winded but it is necessary for the engineer to have a feel for what goes on when a computer program minimises the logic he gives it. The INGOT in the GOLD CARD is a customisation of a PLD (programmable logic device). PLDs are chips

that you buy as blanks and then program your own logic circuit into. All the combinatorial logic in this chip is in the form of sums of products. The engineer, though, provides the logic in a form suited to his way of thinking and then a program called a synthesiser compiles it into sums of products and fits it into the chip thus alleviating the tedium!



Data Protection on QXL/QPC

Herman Huyg

1. Summary

This article describes for those who feel the need for it, a technique where information can be stored in a way that it can only be used by those who are supposed to work with it.

2. Introduction

Each time I see Jochen Merz, he reminds me of a promise I made, namely that I would write another article for QL-today. This was however before I was cold-showered. What happened? Everybody loves feedback. Well over a year ago I wrote something called: Hard Disk and Backup. It even got published! To my biased opinion it was by far the best thing ever printed in the magazine, not trying to sell anything, posing a real problem and proposing a number of solutions. To my mind every QXL-user had cut the article out of QL-today, put it in a frame, and decorated the wall above the computer with it. It was so good that I received not a single critique. That is, until a number of months ago. After a function in Eindhoven, we were eating ourselves an accident at a Chinese Restaurant, when the conversation turned to QL-today (amazing, why not football, or the weather?). An embarrassing subject of course, since the publisher was at the table. Somebody made the remark that he quite liked the level of contributions, but there was one, something about backup and hard disks, he considered to be utter rubbish. I said I was the author. To make a long story short, a combined British-German intervention taskforce prevented object & subject of using more solid (counter)arguments. So there you are, back to square one. So this time I move to a subject nobody is interested in, which is just a space filler, it may not be read,

comments will be ignored and I have fulfilled my obligations.

It is amazing how people are very curious to find out about other people's affair(s). When I worked for a multinational many years ago, we had just acquired a UNIX-system, complete with source listings (only one inch thick). Two people, fresh from university joined the department and wanted 'to go into' the source. We monitored their actions and found out that the only thing they were interested in was how the password algorithm worked (very primitive then!). At the same company, with its own global network, the London branch had decoded the 'user id's' and associated passwords of any user on any (IBM) system on the network, so that they could (and did) access any information on this massive system. In the Netherlands there have been recently two well publicised cases of break-ins into systems of the Police & Department of Justice, where amongst other information, full names and particulars of police informers have changed hands. The data on my computersystem (QXL & PC) does not contain any names of informers nor other sensitive data which could be sold to third parties or the Press, but this is just a case of principle.

Curiously, I find the QL (software) very suitable to implement PDQ a PDS (Protected Data System).

3. Why?

Once you have decided you want a PDS, you have to find reasons why it is essential in your further life, just to satisfy your conscience. If you possess a floppy disc system, or one with removable hard disks then you have no problem at all! Make sure that your sensitive data is stored safely and separately away from your computer. End of article for you. Most of us(?) have a system with a fixed hard disk. If the amount of data you want to protect is small, then it is worthwhile to consider the just mentioned solution of storing that data on floppy. End of article for most of the remainder of you.

From now on we are just concerned with those who have a fixed hard disk and want protected data on it. You might argue that you have protected your system through a password mechanism. It should be noted however that:

- by 'draining' the CMOS variables, or
- by replacing the 'BIOS' chip, or
- by 'transplanting' a hard disk from one system to another, one can access all your precious data.

TF Services

superHermes

A major hardware upgrade for the QL

- All Hermes features (see below for list) PLUS full 19200 throughput on ser1/ser2 not affected by sound
- IBM AT keyboard interface (plus foreign drivers)
- HIGH SPEED RS232 industry standard two-way serial port. 4800cps throughput (supergoldcard - qtpi - zmodem) at 57600bps
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All this on a professional board about twice the size of the 8049 co-processor it replaces

Cost (including manual/software). **£90** (£92/£87/£90)
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The ORIGINAL system operating system upgrade

MINERVA RTC (MKII) + battery for 256 bytes ram.
 CRASHPROOF clock & I²C bus for interfacing. Can autoboot from battery backed ram. Quick start-up.

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DEBUGGED operating system/ autoboot on reset of power failure/ Multiple Basic/ faster scheduler- graphics (within 10% of lightning) - string handling/ WHEN ERROR/ 2nd screen/ TRACE/ non-English keyboard drivers/ "warm" fast reste. V1.97 with split OUTPUT baud rates (+ Hermes) & built in Multibasic.

First upgrade free. Otherwise send £3 (+£5 for manual if reqd). Send disk plus SAE or two IRCs.

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A small plug in circuit for the QL's ROM port giving up to 8 mbytes of permanent FLASH memory. Use it as a boot device (ROM1_) by saving a superBasic BOOT program - fully boot a QL without drives.

2 mbytes RomDisq.....**£39** (£41/£37/£40)
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Connects to Minerva and any Philips I²C bus

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2 amp (for 8 relays, small motors) ... **£40** (£43/£38/£44)

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Parallel Interface Gives 16 input/output lines. Can be used wherever logic signals are required..... **£25** (£28/£23/£27)

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Other components (sockets etc) also available

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Prices include postage and packing (Airmail where applicable). Prices are: UK (EC/Europe outside EC/Rest of world). Payment by cheque drawn on bank with UK address, debit card/Mastercard/Access/Eurocard/postal order or CASH! (No Eurocheques). Send SAE or IRC for full list and details

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MasterCard

In general the following situations are vulnerable:

a. your computer might be 'nicked' (stolen or 'borrowed'),

b. your computer is 'live' and you went off for some pressing errand,

c. many programs use temporary space, mostly on hard disk, leaving spurious copies of Top Secret Information here and there. You might be surprised if you found out how many copies of essentially the same information lives, unknown to you, on the hard disk. With a very simple program one can 'reveal all'.

4. The QXL

Just a note beforehand: If QXL is mentioned then QPC is meant as well. Contrary to all high level thinking we should consider the features of the QXL and forget for the moment the objectives. So I am not saying what we want, but what we have and what we could do with it. I just consider that what we should have wanted but cannot have as something unimportant. Makes life much more bearable.

Now, SMSQ(E), the Operating System of the QXL, has a very neat facility, just like QDOS, called Multitasking, meaning that more than one program can execute 'at the same time' as long as they don't bite each other. Excellent for our purposes, see later. The other fantastic feature of the QXL is the facility of 'ramdisks', they are disks but they are not disks, they are simulated disks in memory. Finally, the fact that SBASIC functions in a multitasking environment, is a great help. I could stop here now, because with these ingredients the DPS problem is already half solved. For those of you not seeing the light yet let us go a tiny bit more in detail now.

Well, we want data protection, but paradoxically we don't want to know about it. In technical jargon some people say: it should be transparent (for you and me: see-through), we don't want to be bothered by it, it should just do the job and shut up. Finally we come to the 'how', and the big word comes out: sensitive data could be 'encrypted'. Let me say that this is not the only way leading to Rome, but it is the one I have taken. My data on the hard disk and on the backup tapes is totally meaningless, unless it can be 'decrypted'. Of course it can be, but you cannot and I can do it. I have made my system a bit more general in that I allow more than one user, each of whom having control over his/her own encryption/decryption rules. Now, the abso-

lutely brilliant and genial idea is that I allow the 'readable' data ONLY to exist in volatile memory, i.e. the 'ramdisks'. In other words when power is switched off, there is no trace of my Top Secret Data.

The System Outline is as follows:

1. All operations (text editing, compilation, testing) are executed in internal memory.

2. In the Background there are two (in fact one) programs lurking around, 'encryption and decryption', coming into action when something has to be read from or to be written to hard disk. That's all folks!

5. Legal issue

Not only in the UK, but in a number of countries and at the European Union level there are worries about data encryption. They don't mind too much about that, as long as as you don't do a proper job, that is, the CIA, MI5, MI6, BVD, BND, KGB, SOS, big brother and your sister must be able to decode YOUR data. That is the intention and all kinds of weird proposals are currently generated. One of them being that you must deposit a spare copy of the 'key' used for 'decryption' at some (e)state agency. But the house is yours! Don't worry, before the whole world wide web and Mr Spiderman have agreed to uncommon sense our computers will be obsolete. But do not say you have not been warned.

6. Implementation

Of course it sounds all very simple, but it is not that easy. Here are a few challenges:

- communication between concurrent tasks,
- speed of encryption/decryption,
- encryption algorithm,
- keys.

6.1. Communication between tasks

The problem is the following one: Program X decides that it needs file Y. Program Z is the decryptor and sleeps in the background, waiting for something to chew. How does X tell Z that Y is needed? How does Z tell X that Y has been processed into something decent? To make things a bit more complicated, Program Able, Program Baker and Program Charley have similar demands. You said 'pipes'? There is a small problem in that the only useful ones, namely the 'named pipes' are only available under SMSQ/E and my QXL works with SMSQ and I don't want to spend cheap DM's just for a

few extra facilities. So this is solved by creating a file with a reserved name on 'ramdisk' containing the filenames requiring treatment. The encryptor/decryptor program checks every 500 milliseconds if there is anything to 'eat' and if so, it wakes up, otherwise it goes to sleep again for another 500 milliseconds. Next problem.

6.2. Speed of en/decryption

If you want to do a proper job then you need lots of cycles, many millions of them. Just for decrypting about 100K of data my 25Mhz QXL requires about 17 seconds, the QPC on a 100Mhz Pentium well over 60 seconds. You see, I use my cycles. On a basic QL I would need more than half an hour to start up! Solution: be selective, for example I encrypt source files, but not object files (my programs are never stored as executables, but as a collection of object files, the 'make' file to glue them together is encrypted though!) My selection is: make file, source files, Job Control Program (in SBASIC), Quill & Text87 files.

Alternative solution: find an algorithm, which doesn't make such a high demand on processor power. Next problem.

6.3. Encryption Algorithm

I shall have to disappoint you, but I shall not tell you the one I used. I have been amazed about the number of publications about this subject. My advice is: find an obscure one, program it yourself and nobody will find out. Almost any 'standard' one has been successfully 'hacked'. But if you are clumsy enough in your programming so that any resemblance with the original intention is purely accidental, everybody will be baffled. At least that is my illusion. It avoids legal problems too!

6.4. Keys

It seems we need keys, now that is a danger, because you can lose keys, and you might well end up with files which stay meaningless for the remainder of their existence. If you use keys, (you don't need to) use a two level system, use a 'master' key to activate the system and which decodes a file containing the real encryption/decryption keys. Nobody will ever see you entering the actual keys and files are consistent and secure outside your system. Build sufficient protection for your masterkey (never display it for example).

7. Epilogue

I am pretty confident about my DPS, but there is one big flaw: the waste paper bin and the printed matter. But I leave it to your imagination to cope with that problem.

A reader with some imagination might consider to protect his or her sensitive data on the QXL/QPC, it is much safer there. I for myself am just doing that. But I had first to write a PC program which can transfer files between QXL and PC. That is operational now, and it might, I said MIGHT Jochen, be a subject for a later article.

Meanwhile I challenge anybody to decode any of my encrypted files. A full crate of beer of your choice for the first person able to do so. You get three months after publication of this article in QL-today to do it. Files can be obtained from me for one pound sterling per 5Kbytes, as many as you can afford.

I can be contacted via email at:

2h@compuserve.com

I found this article quite interesting, looking forward to your next article - Jochen!



Christmas Cajole

Roy Wood

Snow was settling in large flakes on the grimy windows as he sat pecking away at the old QL keyboard, illuminated only by the light of the 10" black and white monitor. Some areas of the keyboard membrane had become so worn that he was unable to get them to work at all so he had a complex series of ALTkey settings to allow him to gain access to the letters. Christmas was coming - bah! Another surreptitious way of trying to get him to spend some money. He looked at the dog eared copy of QL Today that he had borrowed from a member of his user group. In it there were adverts for all manner of flashy memory cards and interfaces and a whole host of programs but they all cost money - and he did not like to part with that. Still the old Trump card soldiered on and he had managed to get a couple of old 5.25" disk drives from a car boot sale so he turned back to the letter he was composing in Quill.

"Ah", he sighed, "If only I knew how to write a printer driver". The wind rattled the door and shook the semi obscured windows. Somewhere

in the distance came a sound like the whirring of old microdrive cartridges and a faint voice carried on the increasing wind whispered to him.

"Scrooge, Scrooge" it whispered like a long dead microdrives struggling to replay lost data. "Scrooge you are a bad or changed medium". "What! What!" he struggled to sit up, dislodging a pile of old Quanta magazines from their precarious perch on the edge of the table and sending them fluttering to the floor. "Who is intruding into my house?"

"I have come to warn you of the things that could come to pass, to ask you to mend your ways."

"Who is that?", he cried, looking around the darkened room.

"I am the ghost of computing past, an echo of long lost data unbacked up in the corrupt media of time. I have come to take you on a journey."

"What? Where.", he began but it was too late for that. Like some old sixties sci-fi film starring Ray Miland the room began to spin and he found himself drawn into the depths of the monochrome world before him.

The Ghost of Computing Past

When he opened his eyes he found himself in a shopping arcade sometime in the mid eighties. There, in the window of a large electronics shop, sat a pile of different computers. Amigas, Ataris, Acorns and above them, new and pristine on a special display stand bearing the legend 'Sinclair's latest micro', was a QL with its silver box. He gazed at it remembering those heady days. Beside him stood a tall stooped figure draped in old printout strips. He pointed a boney finger at the window and said, "See how it used to be? So many different systems, you had a choice and there was hope and enthusiasm in the air then. And there was invention. You only had a basic 128k of memory to play with so you had to be clever to get the programs to fit." He walked over to a magazine stand and, by pointing at a magazine, caused the pages to roll over (another one of those sixties special effects). There were all manner of programs available on these pages, games, databases, text programs and a whole pantheon of hardware products. There was a picture of a young Jochen Merz with QD 2 and even a photo of Stuart Honeyball without a bicycle in attendance!

"This is the ghost of computing past", whispered his companion in his ear, "Think well on this."

The scene did one of those dissolve things so beloved of Alfred Hitchcock and once more Scrooge found himself seated in front of his QL - which had locked up. "What a dream!", he thought.

The Ghost of Computing Present

By the following night he had forgotten all about his experience and sat once more in front of his old QL typing. Again came the sound of old microdrives but this time rattling in their plastic boxes as if trying to escape. There on his screen a hand appeared beckoning him and he found himself drawn, once more into the world of the sprite. This time he hovered over a Quanta workshop flying, like the little boy in "The Snowman" (but fortunately without the soundtrack). Below him he saw the QL traders laying out their stock for the show. Bill Richardson was carrying in Z88s and disk drives, Ron Dunnett was arranging his Qubides and Auroras and Tony Firshman was, once more, laying out the ceremonial green cloth on his stall.

"See how hard they work", whispered the sprite, "But still you write letters to Quanta telling people they should all go out and buy a PC - Shame on you!"

"But..." Blustered Scrooge "You cannot compare all this to a PC I mean where are the colours and the sounds?"

"You want colours and sound?", asked the sprite, "So how much will you pay for them?"

"Pay? - Pay?", Scrooge reeling back clutching either his heart or his wallet, hard to tell in black and white. "I don't want to pay anything - why can't they be public domain?"

"There you are," said the sprite, "You want it all for nothing don't you? Where will you get your PC for nothing then?"

He had no further thoughts on this and gradually the scene began to fade. Just before he lost sight of it completely the sprite whispered to him again, "Tomorrow you will meet the ghost of computing yet to come - be ready for he is fast and will not wait for you to catch up."

Scrooge looked down at the thronging punters. He could hear the sound of Jochen's disk drives updating yet another batch of disks and see Stuart launching into a talk on the Ultra Gold Card. He went strangely quiet - and found himself asleep again on his table.

The Ghost of Computing Yet to Come

On the third night he was afraid to be alone in his little office but, since he had left the user group and not bothered to speak with many of the members for a while, he had few friends. Those he did have thought he complained so much they did not want to know either so he was alone again waiting for the ghost. Sure enough it came at midnight and this time the pages flew from the calendar (We really go for the old cliches don't we?). This visitor was different from the other two because it flew with silence of the ROM-Disk and the speed of a 68060. He found himself seated before a 21" monitor split to show several views. One was a user group meeting where the members had Auroras in Tower Cases and sported fast IDE hard drives. The SVGA monitors showed programs zipping along with the aid of the speed and power of the Ultra Gold Card. Windows in many new colours overlapped and interacted together and some members were even using the internet to communicate. On another part of the screen he could see PC users struggling to overcome such messages as 'The program you are using has caused a General Systems failure' and one, trying to run a word processor on a machine with only 120Meg of memory sits looking at an 'Out of Memory' message after typing in his address. This ghost is silent and just points at the screens - a mute testimony. Words appear on the screen: "These are the two worlds that from which you have to choose. You can make your world better or you can join in someone else's. The choice is yours. Support us now and things will improve, get faster, more powerful. Or join the ranks of the Microstuffed and pay more for less."

Scrooge found himself slumped in front of his monitor once more. "What a horrible dream!", he thought (and what a tacky ending) - or was it?



**JOSHUA MERZ
SOFTWARE**

Have you visited the JMS Mailbox recently? If not, give it another chance!

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Remember to use Box 1 if you have a 14400 modem or slower, or a ZyXel 16800: **+49-203-502013**

Use Box 2 if you have a 28800 or 33600 modem (or if your modem does not like Box 1): **+49-203-502014**.

Both Boxes contain the same contents, they share the same database!

There are no plans to provide free updates via internet. Maintaining the Mailboxes is a lot of work. There are no plans to upgrade to 56k - if a new modem will be bought, it will support ISDN (but only, if the demand is obvious). Fortunately, QL files are short, so that downloading PD files and updates is affordable, even with slow modems.

- Advert -

- Advert -



You're here - through 57 pages of QL Today - and you have not yet ordered your new copy of QPC or the brandnew update???

Do you still remember the new features provided by QPC? All the news and details can be found on page 9 of this issue!!!

**JOSHUA MERZ
SOFTWARE**

The Bristol Workshop

Somerset Hall - Portishead

Sunday, 30th November 1997

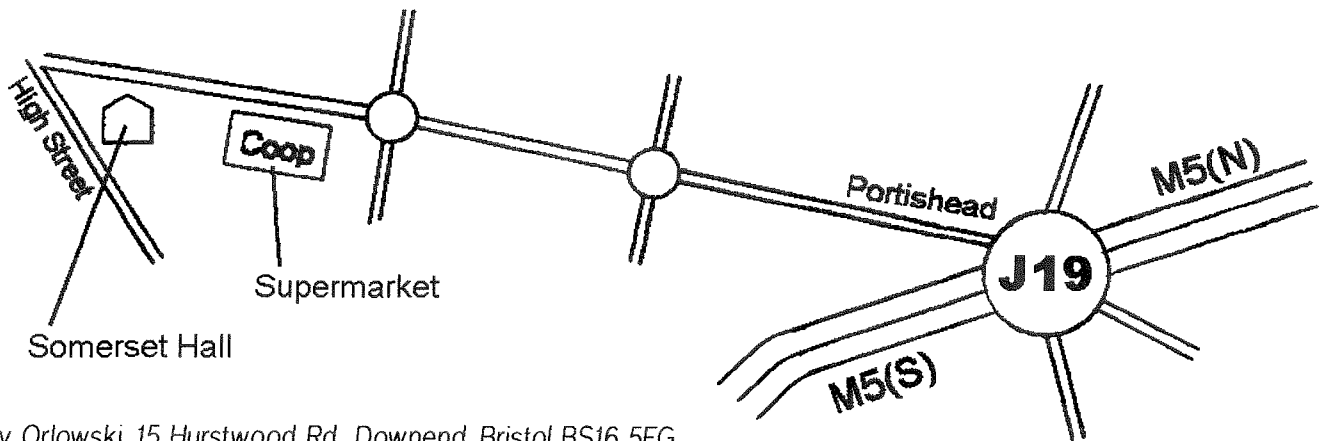
10:00am to 5:00pm

Just another quick note to follow up the announcement I have already submitted regarding the Bristol Workshop.

Any further details can be obtained from either myself, Henry Orlowski on 0117 957 3449 or 01933 665893 or 0378 880903, or from Mike Ashford on 01934 415416. Mike can also provide information about accomodation including some special overnight deals he has negotiated.

Let me assure you that this one is well worth attending.

Directions: M5 motorway, leave motorway at junction 19 and follow signs into Portishead. You will pick up a sign saying "Quanta" or something similar. Approaching the centre of Portishead you will see a Coop supermarket and a large car park. Turn left at the lights and pull into the car park on the right. Go through to the shopping precinct and to the Somerset Hall entrance and up the stairs. Look forward to seeing you there.



Henry Orlowski, 15 Hurstwood Rd., Downend, Bristol BS16 5EG.

MERRY CHRISTMAS
AND A HAPPY NEW YEAR
FROM THE EDITORS
OF QL TODAY